

DISC GOLF COURSE DESIGN: INSCRIBING LIFESTYLE *into* **UNDERUTILIZED** **LANDSCAPES**

by Michael G. Plansky



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DISC GOLF COURSE DESIGN:

INSCRIBING LIFESTYLE INTO UNDERUTILIZED LANDSCAPES

ALSO BY THE AUTHOR:

Discourse Academos: 5 activist essays on the disc golf phenomenon

**DISC GOLF COURSE DESIGN:
INSCRIBING LIFESTYLE INTO UNDERUTILIZED LANDSCAPES**

A Thesis

Presented to the

Faculty of

California State Polytechnic University, Pomona

In Partial Fulfillment

of the Requirements for the Degree

Master Landscape Architecture

By

Michael G. Plansky

2013

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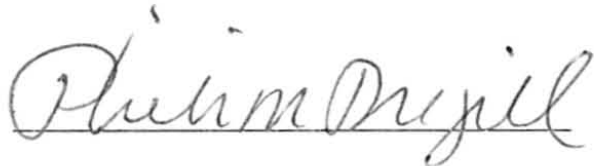
SIGNATURE PAGE

THESIS: DISC GOLF COURSE DESIGN: INSCRIBING LIFESTYLE INTO
UNDERUTILIZED LANDSCAPES

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ABSTRACT

Disc golf emerged as one of several alternative lifestyle sports from the counter-cultural social movement of the 1960s and its popularity has steadily grown while other postmodern recreation forms have faded or plateaued (Wheaton 2004). As an accessible, malleable form of outdoor recreation its appeal can be explained by the sense of place elicited from direct engagement with the landscape and community derived from a culture of play. This thesis identifies the landscape and cultural characteristics of disc golf that make it attractive by collecting and analyzing qualitative data directly from its participants in the Los Angeles region. Semi-structured interviews were conducted at four popular disc golf courses representing four distinct landscape typologies in order to discover motivations to play and user preferences related to landscape characteristics. Demographic results identified patterns of user responses. The results of content analysis of the transcribed interviews revealed an overall reluctance to travel for disc golf, but a desire for landscape variety. Interview respondents also expressed an overall willingness and enthusiasm to play courses developed on underutilized post-industrial sites. Community and camaraderie at each site was shown to be uniquely shaped by rule-creation through play forms (Callois 1961) by either leveling the playing field for newer players, or creating complexity/challenge for more experienced players. As the economy weakens, leisure demand for open space increases (Trust for Public Land 2011) and landscape architecture in academia has the opportunity to research how course growth can activate underutilized urban environments. With new understanding about subculture and course typologies, designers can apply knowledge of disc golf as a unique form of recreation to steer its evolution as a component of multi-functional urban environments. Guidelines and recommendations are given.

For Susie

This thesis about disc golf is dedicated to the memory of Susan “Susie” Kaiser who loved enjoying the outdoors with the people she cared about; walking through the woods on a disc golf course, schussing down a mountain on a snowboard or navigating canyons of rushing rapids. Her memory, and purity of heart will live on with me as I do my part in designing a better natural world for us all to play and learn.

FOREWORD TO LULU.com EDITION

No substantive content has been changed or abridged since the successful defense of the Masters thesis presented here, from the Cal Poly Pomona Department of Landscape Architecture in June 2013. What has changed is that this Lulu.com *Print-On-Demand* paperback version of this thesis is now:

- (1) Available widely in **print**, book form, 2-sided, so that it is easier to order, read, reference and share; including the digital portion of the appendix in print (which is contained on a supplementary CD in the Cal Poly Pomona hard-bound, 1-sided, library copies). The majority of this material consists of the complete **transcriptions** of the **44 interviews** of Southern California disc golfers conducted at 4 courses.
- (2) Offered here in **Black & White** for the sake of affordability. Most of the material herein is text, tables and monochrome graphics, although *the readability of selected color graphics may be impaired*.
- (3) Further enhanced by **correcting** a light spattering of stray grammatical **errors**, typos and formatting inconsistencies, which will live on proudly in the original University volumes.
- (4) The **acknowledgements** have been moved from the front-matter of this volume to the back-matter to make room for the Foreword you are reading here without altering original page numbers of the main body of work.

– The Table of Contents has been amended to reflect changes (1) and (4) above –

The interview transcriptions are frequently referenced throughout the analysis and guidelines sections of this study, and are now more accessible to the reader via its own table of contents on **page 249**. Also more easily referenced in this Lulu.com edition is a catalog of news stories mined from the internet between May 2010- May 2012 about new and planned disc golf courses in North America, followed by selected quotes from these **news stories** which highlight key challenges and opportunities for future disc golf course development.

The **references** cited (bibliography) and **figures** cited sections offer an up-to-date resource in one place on the state of the disc golf phenomenon, either directly, through industry experts, or tangentially, through a collection of related, multi-disciplinary perspectives discussed in the **literature review**. The contention of the original thesis remains; Design professionals trained as landscape architects are well equipped with the broad skill-sets required to identify the convergence of cultural (Wheaton 2004) and urban-ecological trends (Whiston-Spirn 1984), then to translate them into sustainable recreational landscape systems along or within urban margins; a nod to the human-ecosystematic principles of Lyle (1999).

That is not to say that course designer activists with myriad backgrounds should not have an indelible impact on the way we experience disc golf! A broad base of people interested in the direction of disc golf as it continues to grow in popularity around the world needs to develop a **common platform** from which to **discuss** what place disc golf should have in the marketplace, our precious open spaces, cultural meaning and our collective conscience.

It seems disc golf truly is at a **fulcrum point** where the sharing of an eclectic array of home-grown approaches to the promotion and management of disc golf will lead us forward with purpose. As urban regions continue to expand around the world, access to affordable and regenerative **outdoor recreation** is becoming more critical to our well-being. This study contends that the underutilized, **wasted landscapes** (remnants of an increasingly obsolete industrial paradigm), are the most viable options for disc golf to continue growing (adding courses) in Southern California. I am facing the other end of the spectrum, back in my adopted home of Lake Tahoe. The introduction of disc golf courses into more or less undisturbed natural environments is showing promise as ski resorts look at ways to expand year-round recreation offerings with the climate-change induced threat of rising snow lines in coming years. As more land becomes available for developing disc golf courses, environmental awareness and sensitivity ought to be part of the process for inscribing a unique lifestyle form into wilder landscape settings.

No matter where on the natural-urban continuum your site of interest lies, understanding the socio-cultural, psychological, spatial, ecological, and operational aspects of disc golf course design, will help to set and achieve goals. Political and legal aspects of course design are particular to place (Haley 2002), hard to generalize, and not the focus of this volume, but its findings may lay out a set of tools to better communicate with stakeholders in the political process of disc golf course design.

A disc golf revolution is upon us,
and we can collectively decide which directions it should take.
Enjoy the ride.

Michael G. Plansky, January 2, 2014 – Zephyr Cove, NV

DiscGolfersR.Us [online forum]

Reply by Chuck Kennedy (industry expert) on December 21, 2013 at 12:34pm

On “The silent masses”:

“At one time the number (of disc golfers) was about 3%. However, I believe if you could get straight answers from online vendors, PDGA membership among their customers has decreased to 1-2%. This might indicate higher growth among rec players resulting in more than a million active players.”

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PREFACE

Long before beginning formal studies in landscape architecture in 2008, I believed that disc golf was a unique form of recreation and leisure with many untapped possibilities. How might these biophysical and sociocultural layers interact with each other to coax the necessary emergence of new paradigms for a postmodern urban/nature leisure relationship? Breaking down and re-forming disc golf's constituent parts in this study has helped me communicate this promise.

As a youth participating in conventional organized sports such as soccer, basketball and baseball, I benefited from the structure and learned about teamwork but yearned for outlets for individual expression that offered direct connections to surrounding environments. Skateboarding, BMX biking, skimboarding, footbagging (hacky-sacking) and later, snowboarding, were forms of recreation free of constraints and conducive to creative play in changing settings of my choosing instead of the designated boundaries of conventional sports. By high school, team sports lost their importance. *Lifestyle* sports became all consuming and manifest in doodles and drawings passed on to my classmates, trapped at their school desks, who shared my passion for these activities.

As participants of these alternative sports, my friends and I adopted the spaces we performed in as our own; beaches, coves, mountains, streets, plazas and parks. It was our way of showing society how we saw fit to use these unbounded public spaces; an ongoing, evolving commentary. We were performers of our own muse, free from outside critique. In college at University of California, Irvine, I discovered 2-on-2 beach volleyball along the white sands of Newport Beach. Although technically a team sport, there was a subculture of individualism where players picked up better partners as they gained experience and

rounded out their skills. Without set times of play and a king-of-the-court challenge system, there was an exhilarating un-programmed spontaneity, an eclectic mix of personalities, and a sense of exploration as I searched for the best games I could find cruising up and down the concrete boardwalk.

I moved to Lake Tahoe after college to snowboard snowy peaks in the winter and participate in a vibrant beach volleyball culture in summer. Soon thereafter I discovered the game of disc golf in the hilly pine forests above the beach where I played volleyball at Zephyr Cove. For our group, the two lifestyle sports were such a perfect complement that I developed a festival-tournament that combined both. For five years the Disc-N-Dig Festival was promoted as a party that emphasized participation in two low-impact outdoor forms of recreation, hosted live music and promoted sustainable lifestyle alternatives with the support of dozens of local sponsors. Teams of three (triangulation) had to play both a volleyball tournament and a round of disc golf to see who was best at both. In the end, first place got first choice of a deep pool of prizes, but everybody won a prize they wanted. By providing structure but de-emphasizing the imperative of winning, the event served to welcome and introduce people new to one sport or the other. The sharing, camaraderie and creative play atmosphere in stunning natural settings made it successful.

Observing first-hand the ebbs and flows in popularity of lifestyle sports throughout my life has prompted reflection on what draws people to them. Disc golf brings me in tune with the landscape and my companions in such a way that I can live in the moment, reflect on the past and imagine what the future holds. While other lifestyle sports have faded, disc golf's continued growth does not come as a surprise, but I wonder how its experience could be improved through design as demand for new courses increases. By investigating why disc

disc golfers play particular urban courses in this study, I hope to gain knowledge about how to adapt the activity as a sustainable cultural form occupying different landscape typologies.

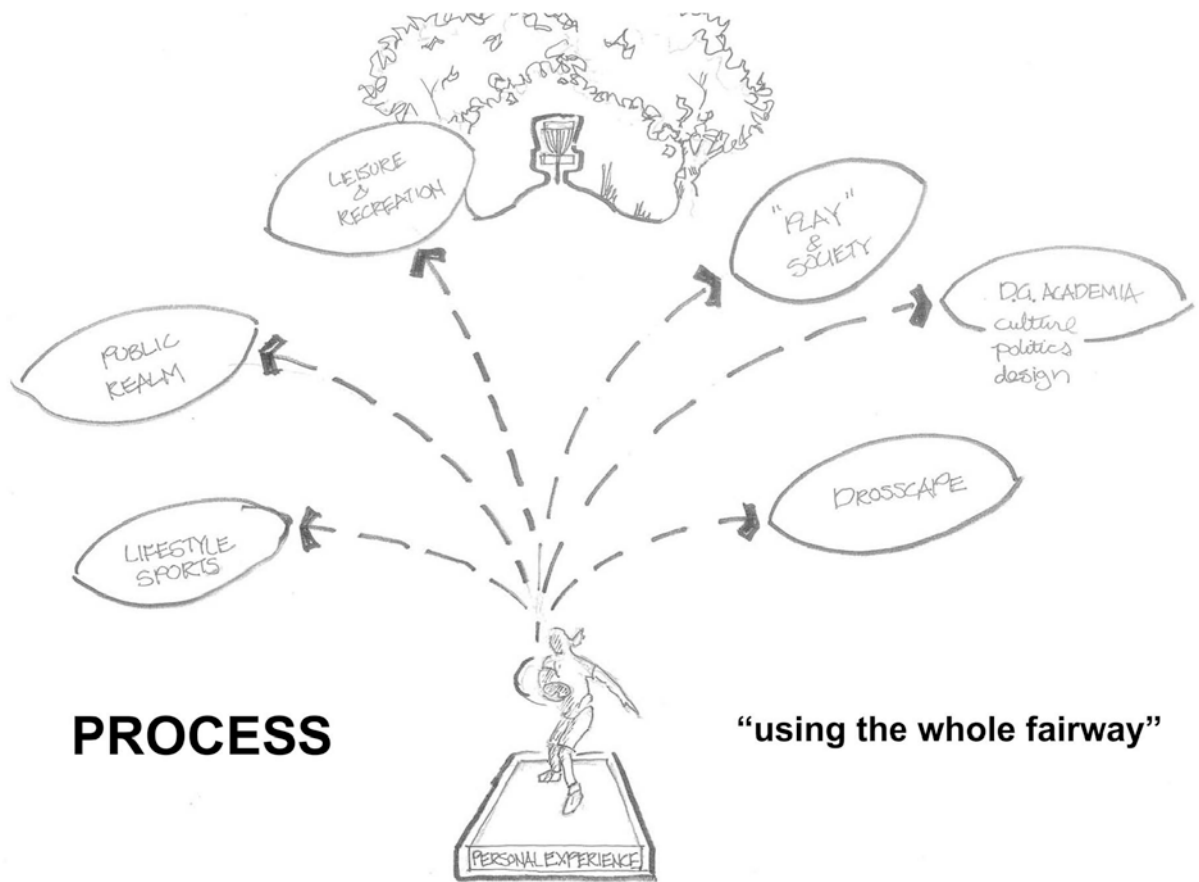


Figure 1. Disc golf intuitive leaps

CHAPTER 1: INTRODUCTION

Problem statement

In 1975 the first permanent disc golf course was established in Pasadena, California (Malafronte 1998). Today there are more than 5,000 courses worldwide (DG CourseReview 2013) and an estimated 500,000 regular disc golfers (PDGA 2011). Why has it grown so fast? Does it have the physical space available to continue growing so fast? It will be argued that because disc golf has a mix of qualities unlike any other activity that may be categorized as a *postmodern lifestyle sport*, it sets the stage for developing the kind of playful, public civility that generates creativity (Sennet 1977). If so, this innovative verve might well be harnessed to inscribe disc golf courses synergistically into many typologies of underutilized urban landscapes, where other land use options are incompatible or untenable.

The complexity of issues that perplex contemporary landscape planners who seek to resolve the problems associated with ever expanding tapestries of urban/nature morphology (Whiston-Spirn 1984) have long been considered *wicked problems* (Litter & Webber 1973). Attempting to resolve such problems with right or wrong answers can certainly become bewildering if not grounded in a sociocultural understanding of a phenomenon. The academic study that follows is grounded on the idea that discovering why disc golf continues to grow quietly, yet exponentially, by way of bottom-up investigation – values, beliefs and perceptions of participants – will add value to top-down expert knowledge. While Figure 2 illustrates this strategy, it is understood that *experts* also use deductive reasoning to understand behavior. Nonetheless, emphasizing the need to qualitatively understand the participants is the drive of this study. In this context, it is worthwhile to investigate how the roles of leisure, play and culture may inspire paradigm

shifts for wide-ranging incarnations of underutilized landscape forms – the wasted public realm (Berger 2006). Recent scholars of urban spatial dynamics have noted the emergence of complex systems that exhibit order and pattern across many scales and suggest that the spatial patchiness we observe on the surface (Anas, Arnott and Small 1998) can be linked to individual behavior. Irwin, Jayaparakash and Munroe (2008) have investigated the value of bottom-up and top-down models where both inductive and deductive approaches are used to describe urban spatial dynamics because little is known about how urban form evolved from *micro-scale* processes.

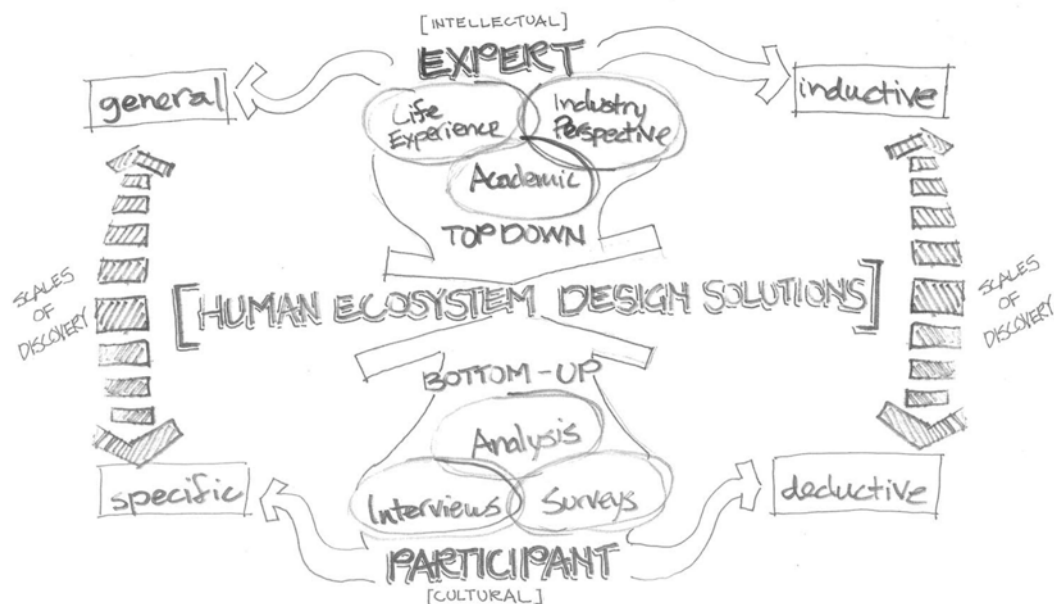


Figure 2. Top-down, Bottom-up

Furthermore, this thesis on disc golf embraces John T. Lyle's (founder of Cal Poly Pomona's Master of Landscape Architecture program) call for **human-ecosystematic strategies** to drive regenerative design, while directly addressing the Landscape Architecture Department's philosophy of "**Regenerating Los Angeles**" by focusing on underutilized, wasted landscapes in the Los Angeles Region. The most brilliant, scientifically-based, well

founded ecological planning and design will not be *sustainable* unless there is a culture that supports its processes over time (Lyle 1997). Loland (2007), warns that sport as 'lived' from the participant's point of view is often overlooked. The emergence of disc golf as a postmodern lifestyle sport over the past 40 years needs to be understood better from this perspective.

The author's own lifelong attraction to several lifestyle sports will be used as baseline narrative for analyzing the qualities they share before determining what makes disc golf a unique iteration of postmodern recreation. Snowboarding is one phenomenon widely recognized as a lifestyle sport that has been described as a holistic experience where technical elements come together in unified wholes (Christensen 2001). "The making of tracks, he (Christensen 2001) says, can be understood as the writing of an embodied calligraphy; as an individual's unique autograph in the snow and, more generally, as a free and radical possibility of constructing identity" (in Loland 2007 p. 116).

As will be further investigated, the non-standardized quality of lifestyle sports may allow a freedom of expression to a greater number of participants not often found in more structured, competitive and commodified conventional sports. Each lifestyle sport leaves its own ephemeral tracks that helps its participants explore their own identities. In disc golf the repeated *calligraphic* flight of a disc may offer the participant the possibility of infinite renewal while relating to their peers and the immediate landscape they share.

Environmental design disciplines frequently employ analysis at several scales; zooming in and out to find meaningful relationships (Simonds and Starke 2006, Steinitz 2012). In order to avoid haphazardly delving into analysis of a design problem at a particular scale it is wise to inventory existing scholarly knowledge that relates to the subject of interest. Connections

can guide the scale of inquiry so that meaningful questions may be asked about people, place and experience.

Significance of the study

This study represents an accessible example of innovative inquiry into what a sustainable future will look like (people/place, urban/nature). The contention of this study is that the disc golf phenomenon is currently at a fulcrum point where particular influences going forward may have a dramatic impact on its future identity, while it is still relatively unknown to the masses. An influx of recent academic attention on the abundance of lifestyle sports emerging today provide a range of insights that can apply to a range of sports (Wheaton 2004). Some leisure recreational phenomenon have come and gone, surged and receded, such as inline skating, beach volleyball and snowboarding. What makes them come and go and what can these trends tell us about disc golf?

New paths must be explored that acknowledge the convergence of trends in order to discover functional synergy. Landscape architecture has yet to assert its multivariate, interdisciplinary skill-set as the basis for expertise in disc golf course design, even as courses are being installed at an exponential rate (Figure 13), and mega-regions such as Los Angeles are desperate to provide additional park space (Trust for Public Land 2011). As the economy weakens, demand for open space is increasing (Trust for Public Land 2011). There is an untapped opportunity with disc golf to leverage available land and landscape architecture's ability to assimilate concepts and data into the form and function of the public realm as a low-cost, accessible outdoor activity.

The grass roots efforts of disc golf participants and industry leaders have produced a wide range of course typologies and qualities over the past 38 years, but no one seems to be examining the cultural evolution of disc golf as it relates to physical design over the sweep of time. It is necessary to identify the preferred landscapes for disc golf in order to imagine what value it may have to a society facing a scarcity of resources (Assadourian 2012).

This study is an example of where landscape architecture can reveal the dynamics of unique and emerging forms of leisure activity. The people who participate in lifestyle sports and other forms of semi-structured, lifestyle-based recreation inhabit previously vacant patches and corridors of the public realm where the urban/nature matrix are becoming increasingly blurred (Marris 2011, Whiston-Sprin 1984). Even when disc golf courses are designed and installed successfully, the process has often been long and arduous (Appendix F: Disc golf news story catalog). If landscape architecture can help professionalize the disc golf course design process, making it more efficient, it must tap into the values, beliefs and perceptions of the subcultures that create them.

Background

The disc golf phenomenon

The best way to explain disc golf to laymen is to compare and contrast it with the well known and widely understood sport of golf, originating in Scotland. Disc golf is alternately known as *frisbee golf*, *frolf* or *hippie-golf*, among other monikers, but will be referred to only as “disc golf” in this study. *Frisbee* is a trademark of Wham-O Inc., whose first product was a Slingshot in 1948 (Malafronte 1998). In 1957 Walter Morrison sold his rights to a flying disc design inspired by the adaptive use of pie-tins called the “Pluto Platter” to Wham-O (Malafronte 1998). Connecticut college students had their own name for the Pluto Platter based on the name of the Frisbie Pie Company in Bridgeport and subsequently branded by Wham-O as “Frisbee” (Malafronte 1998). Success of the Frisbee as a product came when Ed Headrick, head of Marketing for Wham-O in the mid 1960's, made improvements and patented a design for more control and accuracy. It was also Headrick who formalized the game of disc golf with the invention of the “Pole-Hole” (Figures 3 & 5) in 1974 and the installation of the first formalized course in 1975 in Oak Grove Park (Figures 4, 6 & 7), now *Hahamonga Watershed Park*, in Pasadena, California (Disc Golf Association n.d.), using 18 of his targets. Today the course has 20 possible targets but often only 18 are played. Headrick also formalized the rules of disc golf to encourage its proliferation which led to the formation of the Professional Disc Golf Association – PDGA – a nonprofit organization, to manage its growth and the Disc Golf Association – DGA – a for-profit organization, to develop equipment for the game (Disc Golf Association n.d.).



Figure 3. Pole-hole (discgolf.com n.d.)



Figure 4. Original target (photo by M. Plansky)

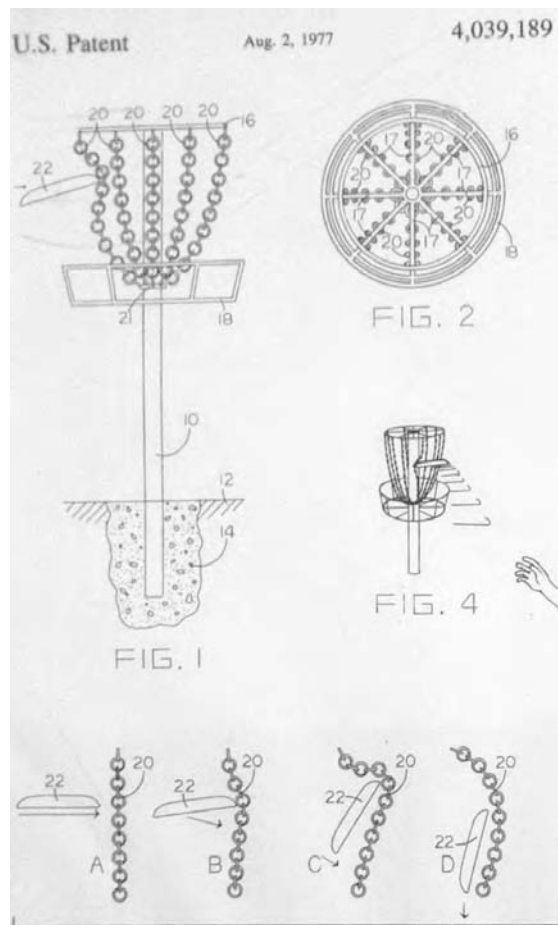


Figure 5. Pole-hole patent (discgolf.com n.d.)

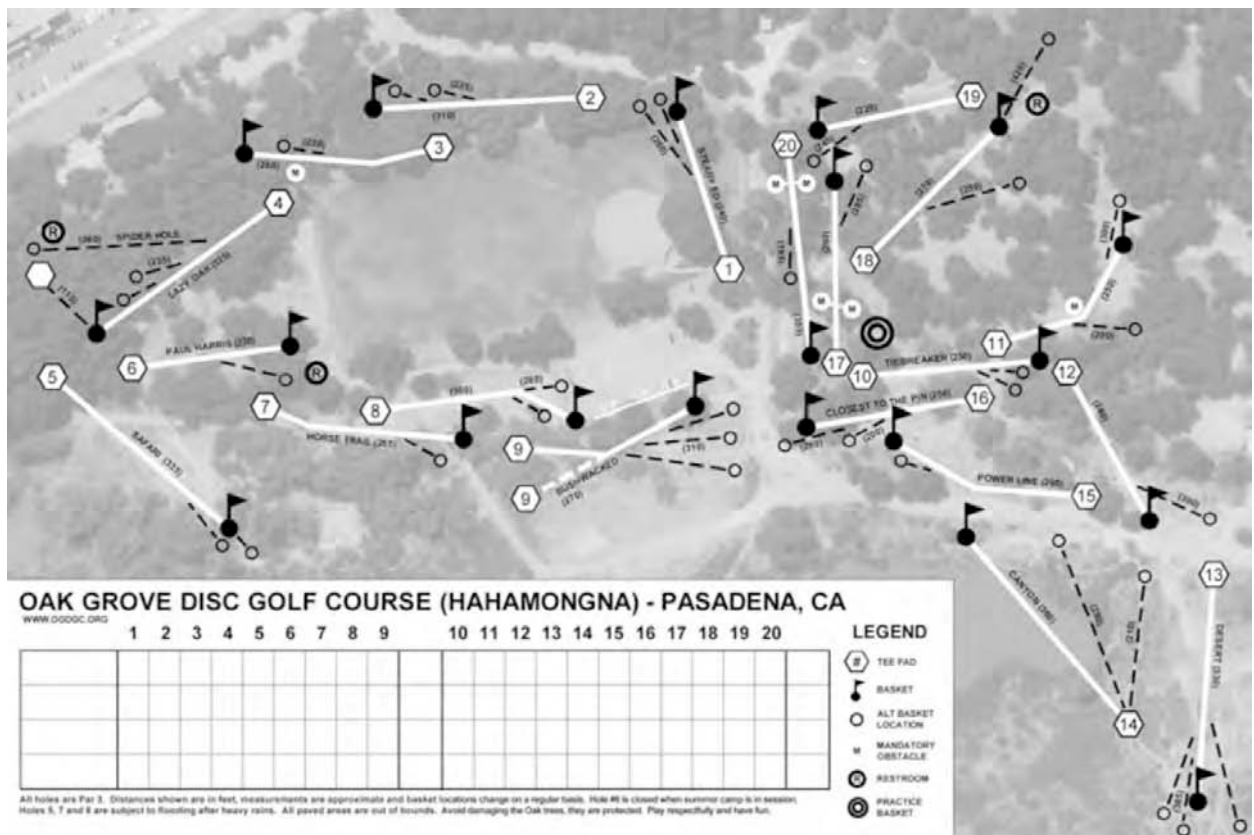


Figure 6. Oak Grove disc golf course map (dgcoursereview.com 2011)



Figure 7. Oak Grove present day character (photos by M. Plansky)



Figure 8. Oak grove historic sign



Figure 9. Pole-hole prototype at Oak Grove 1974

Dave Dunipace invented beveled, triangular golf discs and in 1983 he founded Innova Champion Discs. It was a breakthrough that led to increasingly more control, finesse and distance (Simons 2012). Soon people introduced to disc golf were able to enjoy the game almost immediately and new disc designs offered flight characteristics that worked for driving, mid-range and putting, much the same way ball golf clubs are selected for appropriate shots, making the game more engaging and strategic (Simons 2012). Today Innova is the largest, but only one of many golf disc manufacturers who continue to develop new technology. The flight characteristics of flying discs have been investigated in depth in a University of California, Davis Masters Thesis entitled *Frisbee Flight Simulation and Throw Dynamics* (Hummel 2003). Many players become infatuated with the physics and technique of throwing a golf disc through the air to navigate changing landscapes (Sandoval 2012).

Both versions of the game (ball golf and disc golf) are based on the goal of putting the object (ball/disc) into a hole/basket in the least number of strikes/throws, starting from a designated *tee ground* or *tee pad*. Table 1 compares the basic terminology for both versions. The format for playing golf lends itself to certain experiential qualities for the golfer; *non-contact*, *individual* (although team play is common) and *non-standardized playing area*. Both also generally follow a *loop*, *zigzag*, *figure-eight* or *out-and-back* route that leads golfers sequentially through each hole, connecting holes and tees with paths or trails and generally ending in proximity to the starting point (Burzynski 2008). Figure 10 depicts these four patterns in plan view. Actual courses can take the form of combinations and variations of each pattern. Oak Grove, for example, is a loop plus a figure-eight in its present day 20-hole course layout. Holes sometimes cross fairways or share portions of fairways when space is

limited or when designers wish to maximize the value of landscape features such as picturesque valleys. Such design decisions are risky because they not only disrupt the flow of routing patterns, but also create safety concerns in both ball golf (Doak 1998) and disc golf (Houck 1998b).

Table 1. Golf versions comparison table

COMPARE	BALL GOLF	DISC GOLF
Propulsion	STRIKE (STROKE) Clubs (hands to club face to ball) various forms for different flight patterns: drive – approach – layup – putt – dogleg left – dogleg right – various others	THROW (STROKE) Discs (hand to disc) various forms for different flight patterns: drive – approach – layup – putt – <i>hyzer</i> to left (right hander) <i>anhyzer</i> to left (right handers) – various others
Lie	Played from the ground where last stroke came to rest	Played from <i>in-hand</i> at or behind a line perpendicular to an imaginary line from the previous place of rest of the disc, to the target
Target	HOLE: 4.25" diameter, at least 4" deep, flush with the ground	POLE HOLE: 26" diameter <i>basket</i> , 8" deep, with the rim 30" to 35" off the ground, supported by a pole which also supports hanging chains to kill the flight of the disc
Hole diameter ratio	.395 ball/hole	.327 disc/basket
Tee	Designated flat area to place a stand (teeing ground) to support a stationary ball so the player can strike it to initiate the play of a hole	Designated flat area that allows player to take steps before releasing the disc into play
Par + Scoring	Even Par of 3, 4 or 5 strokes: each stroke over Par raises the golfer's score by one (1) and each stroke under par decreases score by (1), lower score = better	Even par of 3 strokes on most holes, with holes of par 4 and 5 being rare

Following the lead of ball golf, disc golf courses usually have 9 or 18 holes, but unlike ball golf, it is common to encounter courses of 27 holes. Figure 11 diagrammatically compares the scaling of disc golf as it relates to ball golf. Some other critical differences between disc and ball golf are outlined in Table 2.

Table 2. *Golf versions contrast table*

CONTRAST	BALL GOLF	DISC GOLF
Land Area Required	7 to 10 acre/hole (Amick n.d., Graves 1998)	.5 to 3 acre/hole (Disc Golf Course Designer Group 2012)
Cost / Installation	\$250,000 to several million (18) (Graves 1998)	\$15,000 to \$30,000 (18 holes) (Disc Golf Course Designer Group 2012)
Cost / Maintenance	More acres to manage, maintain with fertilizers, introduced plant material & irrigation (Graves 1998)	Players often act as stewards and maintenance often 'takes care of itself' through golfer participation (Kennedy 2007)
Cost / Accessibility	Public and private courses can cost anywhere from \$10 to \$500/round or more. Set of clubs: hundreds	87% of course are free Pay courses: \$1 to \$8 (Kennedy 2007, Sinisalchi 2005 & Sandoval 2012) Discs cost \$8 to \$30 each; one disc is necessary to play
Land Character	Acres of wide open space are required. Too much vegetation or elevation change is prohibitive. Soils often require amendment (Doak 1998)	Tight spaces and elevation changes are not only playable but create interest/challenge (Kennedy 2007) Easy to work with existing soils/native plants
Tee Times / Formality	Tee times and orderly sequence of play prevail	Informal setting allows flexible tee-times, replaying holes and option to start or end on any hole
Course Relocation	Financially and logistically difficult or prohibitive	Easy to relocate targets (baskets), leaving little trace
Use Compatibility	Very limiting in compatibility with other recreational uses: though some par 3 <i>pitch and putt</i> courses have integrated with disc golf (Sandoval 2012)	Due to smaller area required and less equipment needs, blends well with other uses such as hiking, picnicking, event and passive sports (West 2012)

Disc golf is a rapidly growing (Butler County Tourism 2009, PDGA 2011, Sinisalchi 2005 & West 2012) *lifestyle* sport or activity (Burzynski 2008). The disc golf industry is driven by sales of golf discs (Kennedy 2007) and as free courses become more numerous and accessible, sales promise to keep growing (Simons 2011). Harold Duvall, part owner of Innova Champion Discs Inc. of Rancho Cucamonga, California reports "We've seen steady annual growth in the neighborhood of 15 percent over the past 20 years and expect that yearly growth to continue for the next 20. At this rate, communities and regions with existing courses will need roughly twice their current disc golf capacity in just 5-7 years and many communities haven't started yet" (Kennedy 2007, p. 36).

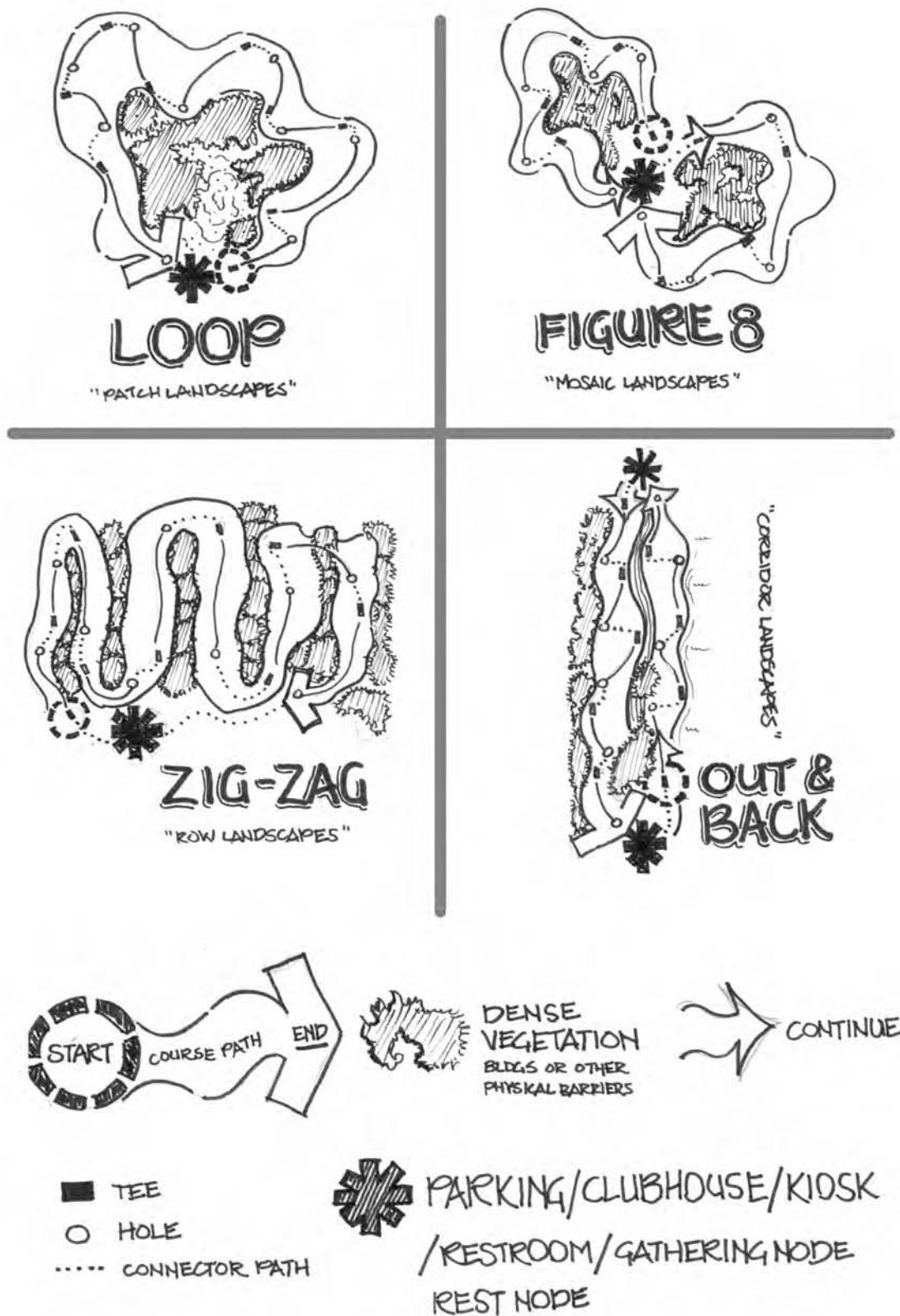


Figure 10. Course routing patterns

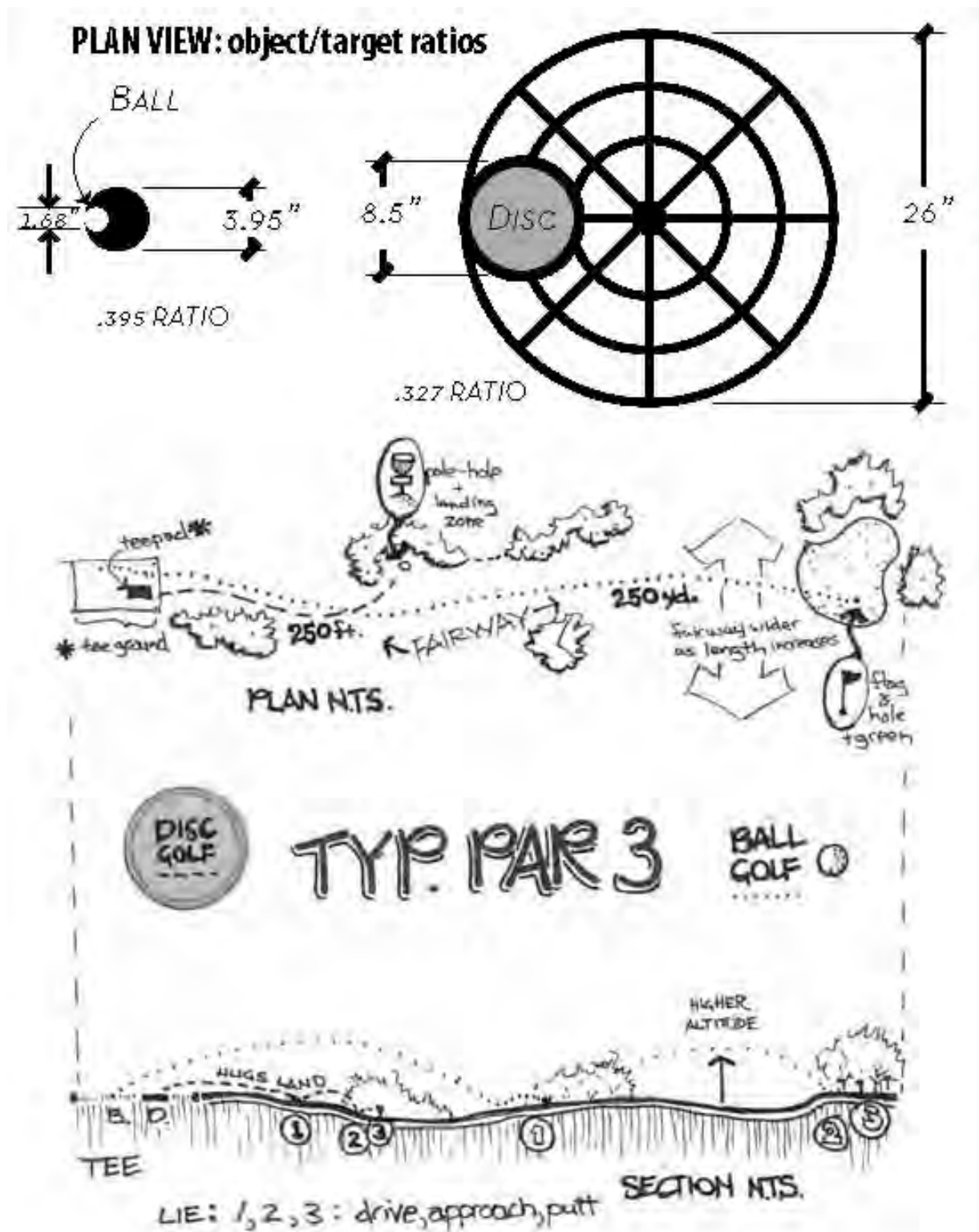


Figure 11. Golf scaling comparisons: target & layout

Twenty-three years ago, in 1990, there were 350 disc golf courses (mostly in the U.S.), and today there are more than 5000 courses with more appearing abroad (DG CourseReview 2013), more than a 1400% increase. If Kennedy (2007) is correct about the 'next 20 years' and course development keeps pace with disc sales, the world could be faced with the prospect of hosting in excess of 40,000 disc golf courses. It has been estimated that there are 30,000 ball golf courses worldwide, with 20,000 in the U.S. (China Daily 2009).

The number of courses accessible within a region is a good measure of capacity and can cost relatively little to construct on a per player basis. For example a \$100,000 tennis court facility may accommodate 8-16 participants at a time, a \$15,000 18 hole disc golf course maintained by activist disc golfers may accommodate 70 participants or more at once, often on land unfit for other recreational uses without excessive earth moving (Sinisalchi 2005).

The best demographic statistics available about disc golfers comes from the information gathered from individuals who have become members of the Professional Disc Golf Association (PDGA) which promotes disc golf as a healthy alternative sport and sanctions tournaments/rating systems. The PDGA (2011) estimates that there are about 500,000 regular disc golfers and that 8 to 12 million people have tried it at least once. By the end of 2012, PDGA membership had exceeded 20,000, but it remains only 3% of regular players. It may be difficult to make generalizations based on characteristics of PDGA members for two reasons. First, disc golfers who become members are more likely to be individuals who want to compete in sanctioned events, and may be more competitive than the disc golf population as a whole. With only 7% of PDGA members being female, there may be other gender barriers at work besides competition. Secondly, since it costs money to join the

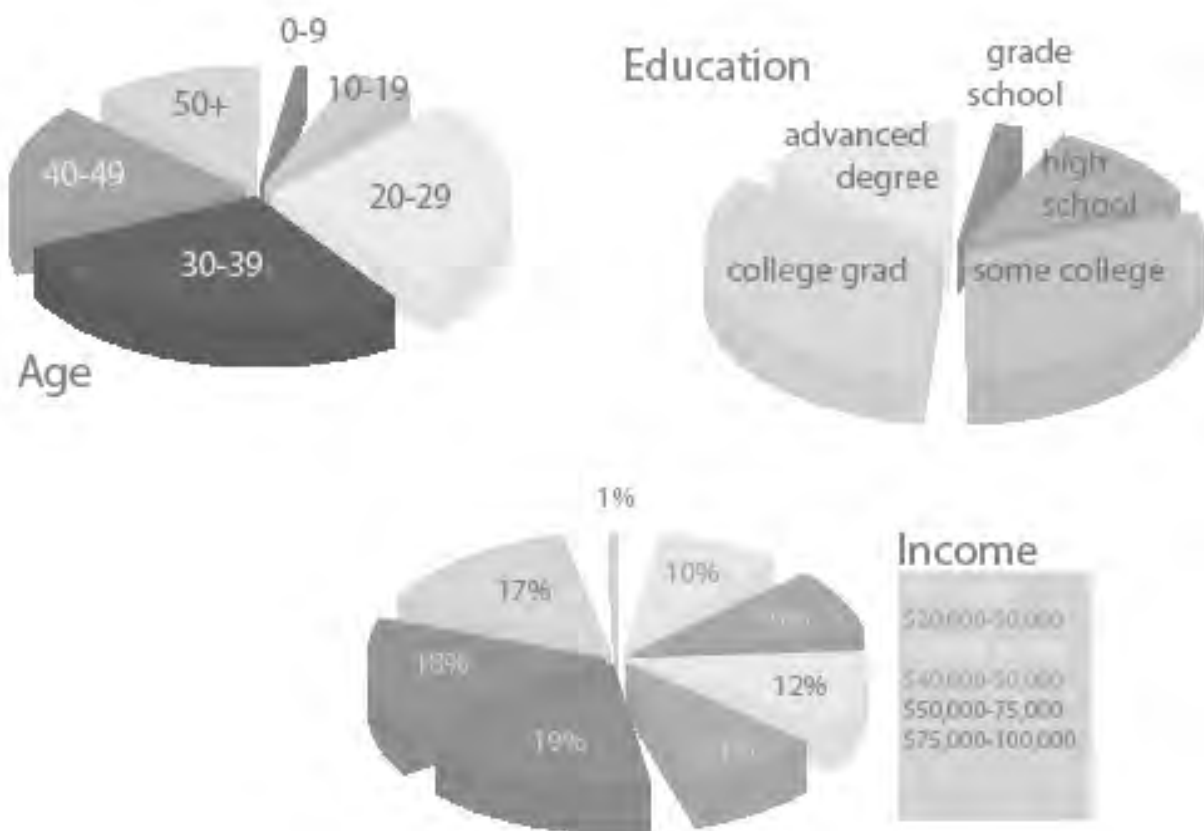


Figure 12. Professional Disc Golf Association (PDGA) member demographics

PDGA and participate in its events, their statistics on the income of their members may not be representative of a growing population of disc golfers who are attracted to the low cost of the activity. PDGA demographic statistics report high levels of education for its members (Figure 12). Given that education levels are strongly correlated with income and age (Card 1999), it is difficult to characterize non-member disc golfers in these categories by looking at PDGA statistics. It would be dangerous to base broad planning and design decisions that shape the growth of disc golf on PDGA statistics, but they are very helpful for identifying trends in conjunction with other data sources.

The appearance of new disc golf courses is the ultimate measure of the growth of the sport because the vast majority of courses are free to play and do not discriminate between members and non-members. Courses appear, most often in existing parks (West 2012) because of the grassroots demand and efforts of disc golf communities who see a need for more courses. The PDGA has been tracking the growth of disc golf courses for decades (West 2012), but in recent years, with trends in technology, social media and *crowd-sourcing* (Brabham 2012), a website called dgcoursereview.com has usurped the PDGA as the most reliable tracker of disc golf courses. The website fits a *crowd-sourcing* typology that Brabham (2012) calls *The Knowledge Discovery and Management Approach* similar to *Wikipedia*, except that a central organization directs the process, dictating where to deposit information. The website provides itinerate disc golfers with up-to-date, reliable reviews, conditions and characteristics of courses all over the country and the world.

It is interesting to compare the growth curve of the increase in PDGA memberships (Figure 13) with the growth curve for the number of courses worldwide (Figure 14). Figure 13 is much more linear, while Figure 14 is an exponential curve. This suggests that although competitive, sanctioned, professionalized disc golf, represented by PDGA memberships, is growing rapidly, it is not keeping up with the explosion of growth in number of courses and the new players that come with them.

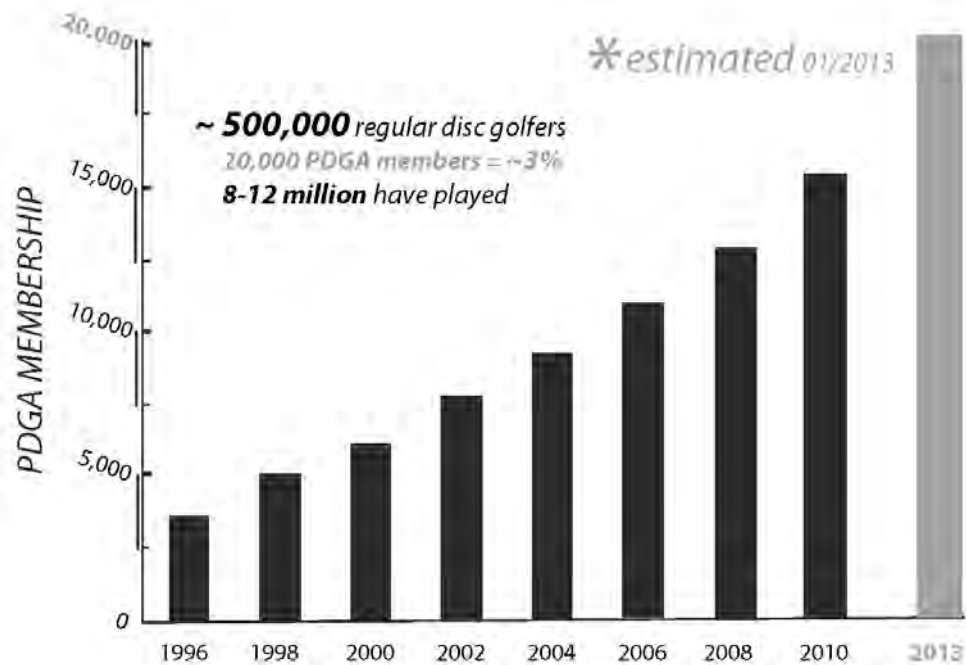


Figure 13. Professional Disc Golf Association membership over time

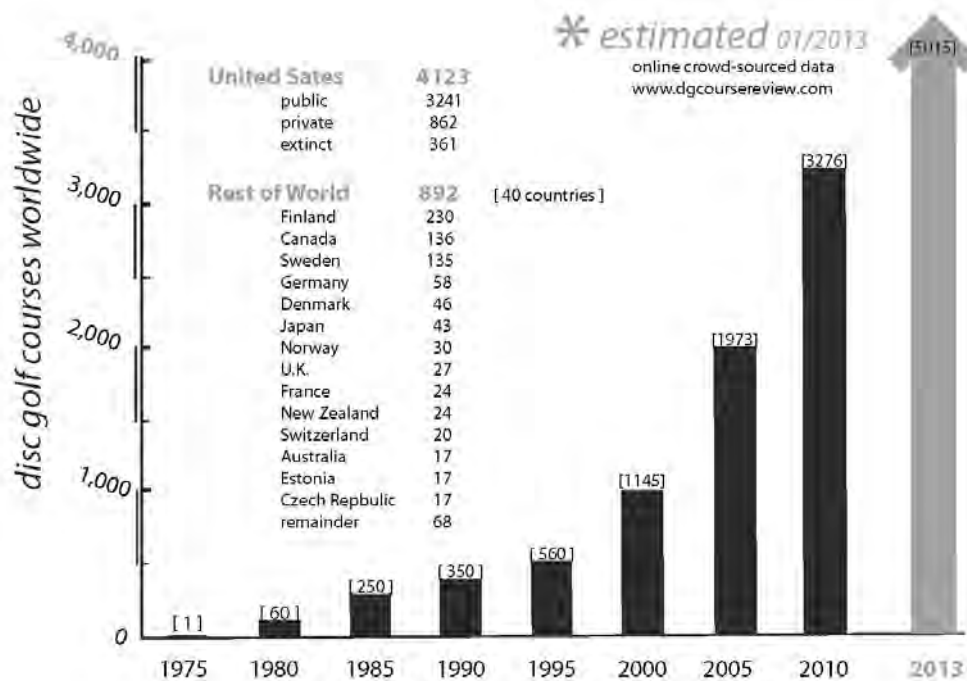


Figure 14. Disc golf course growth

In the Midwest where disc golf courses are most highly concentrated (West 2012), activist and course designer Steve West has collaborated with Tim Gostovic of DG CourseReview, interpreted PDGA survey data and referenced U.S. Census data to estimate demand for a 9-hole versus an 18-hole course in the Chicago area. West calibrated that a charge of \$6.50 to play the proposed course would keep crowds to 1600/week (the maximum an 18-hole course can serve), driving away half of the potential players, while a free 9-hole course would be busy, but less crowded. Figure 15 shows a map that represents where disc golfers live utilizing *hot-spot* graphic presentation, while figure 16 adapts a scheme that West (2012) devised to create zones in North America that contain an even distribution of disc golf courses. These types of graphic representation of data about disc golf help track the distribution of courses over time, and can inform growth management strategies.

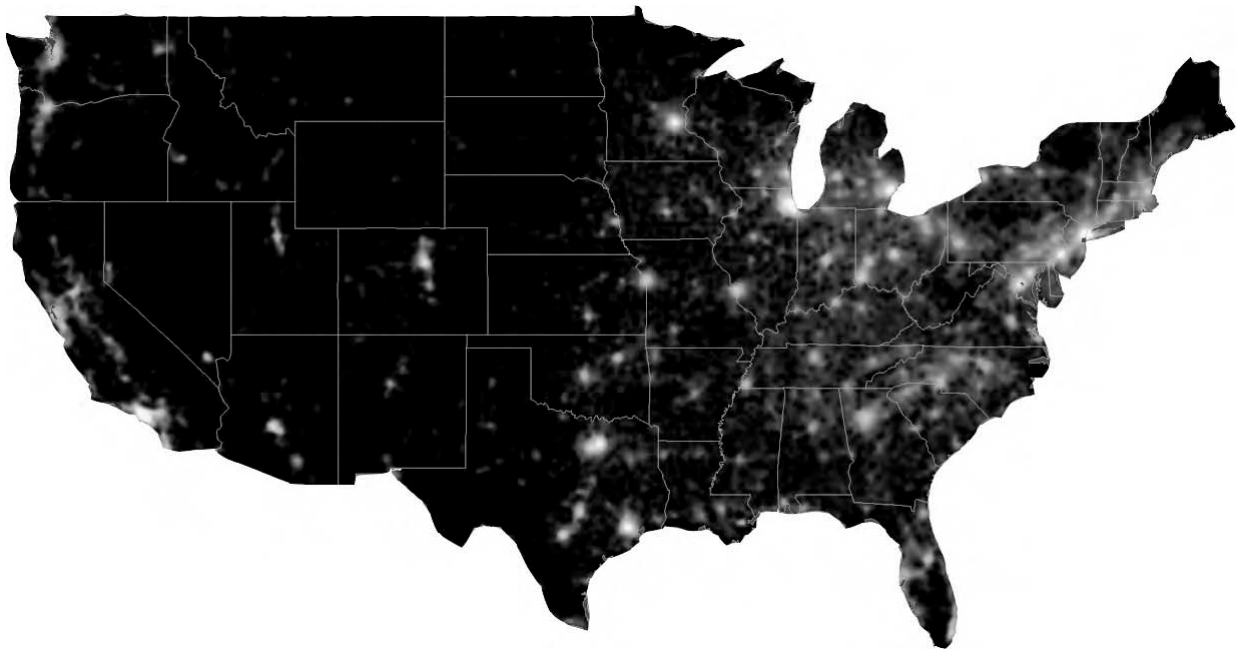


Figure 15. Where disc golfers live

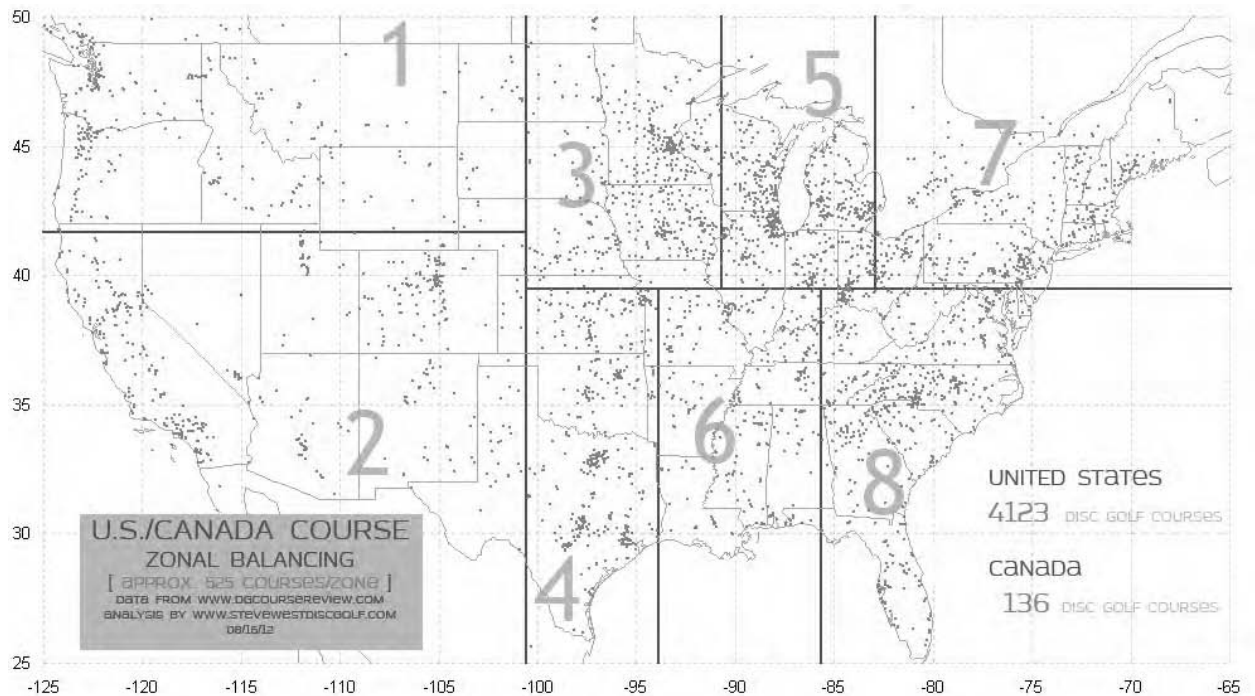


Figure 16. Course distribution map

Lessons from ball golf

The subject of disc golf has piqued the interest of several different academic disciplines over the past 13 years and resulted in valuable post-graduate research, but landscape architecture has yet to produce a thesis or dissertation on the subject. Surprisingly, ball golf course design has also seen little attention in landscape architecture academia. Despite ideals of equality for leisure and recreation espoused by landscape architecture's founder, Frederick Law Olmsted (Beveridge 1995), a popular focus of the inchoate profession in the late 1900s to design places of recreation on estates for the rich (Jackson 1972), remained pervasive throughout the 20th century (Hester 2010). Besides the fact that private clients had more money to spend, this can also be explained another way; environmental problems were less complex and easier to resolve than for lower class clients in urban neighborhoods (Hester 1984). Disc golf courses may offer an opportunity to resolve such imbalances.

As described briefly above, the games of ball golf and disc golf share much of the same structure in form, function and flow, suggesting that an understanding of ball golf course design is a solid basis from which to investigate disc golf course design. But why has landscape architecture not become more involved with ball golf course design given its historic association with elitist projects (Jackson 1972)? Smith (2005) wondered the same thing when he proposed a curriculum in a studio-setting for ball golf course design at the University of Georgia as his Master's thesis. Smith (2005) suggested that the application of landscape architecture's acumen for incorporating interdisciplinary cooperation and ecological processes into the design of ball golf courses has been minimal because of a strong aversion to ball golf related to its pervasive stigma as an inherently unsustainable land use (Perloff and Wingo 1974). Disc golf, meanwhile, may have the advantage of harboring a positive stigma as a green and sustainable form of recreation (Simons 2012).

Helphand (1995) discusses ball golf course historical adaptations and their relationships to landscape design that seeks to balance natural and cultural influences. Helphand (1995) noted that the first gardens were not made but discovered, just as the hummocky topography called *linkslands* made of sand dunes and coarse grasses between the shore and pastures of Scotland were discovered by soldiers with leisure time, as a landscape for a new game: golf (Helphand 1995). He claims "Golf exemplifies the myriad processes of form transformation; oscillation between extremes of chaotic disaggregation and refined synthesis" (Helphand 1995, p. 75). Helphand (1995) explains that because golf is inseparable from the landscape, its forms can be exploded and deconstructed so that the parts can be defined as distinct elements, yet reassembled into new wholes. Golf's ideal landscape morphology origins in Scotland were reconfigured in new territories throughout the world.

The spatial lesson from the adaptations of golf courses is that they do not evolve in a uniform fashion, but as independent parts in concert with each other (Helphand 1995). Helphand (1995) observes that concentric rings radiate from the goal: *hole; pin; green; apron; fringe; fairway; rough; trees*, in the same way one can dissect a garden's landforms, plantings, paths and structures. Psychological implications are addressed when he argues that hazards are essential to the essence of the game of golf because they attune the player to the landscape: "Great courses heighten your awareness of the lay-of-the-land and its visceral aesthetic sensibility carrying with it an awareness of slope, distance, undulations and patterns" (Helphand 1995, p. 80). This awareness achieved by playing a course reveals the genius loci, but at the same time design can conjure nostalgic imagery such as pastoral or childhood landscape memories (Helphand 1995).

The *materials* of a course in the form of tees, fairways, greens and rough work off of each other to create a language. These materials have been altered in size and scope as an exercise in cultural landscape manipulation most dramatically exemplified by miniature golf (Helphand 1995). By eschewing naturalistic forms for an "intellectual playfulness" (Helphand 1995, p. 83) or by consciously inserting an iconographic program, expressive artistic themes can be incorporated without destroying the integrity of a design (Helphand 1995).

Of course there is valuable knowledge to be gleaned not only from landscape architecture critics such as Helphand (1995) but also from ball golf experts who specialize in contemporary course design. Doak (1998), who received an undergraduate degree in landscape architecture from Cornell, has emphasized the importance of golf course *routing* to take advantage of all of a site's natural assets including forest, views and topography with respect to the placement of tees, landing areas, greens and pin placements. Care should be

taken to avoid siting holes that face directly east near the beginning of a course or directly west at the end of a course in consideration of harsh sun angles (Doak 1998). Additional practical considerations that any landscape architect should appreciate include (a) ample space provided at the turn: hole one/nine nexus, (b) greens need to be well drained and preferably sited on plateaus, small knobs, saddles or hillsides, and (c) landing areas need to be larger than greens (Doak 1998). Doak (1998) identifies three broad schools of design strategy:

- (1) PENAL: hazards arranged to punish a bad shot. Emphasizes difficulty – harsh.
 - (2) STRATEGIC: requires players to think about the placement of every shot and hazards almost never completely cross the line of play allowing players to be cautious like setting up the next shot in billiards rewarding thinking and execution over difficulty.
 - (3) HEROIC: similar to strategic except that failure to execute has more severe consequences. Encourages taking risks for significant reward.
- (Doak 1998)

Other schools of design described by Shackelford (2003) are *freeway design*, which favors long straight holes with little variety and *framing design*, which is more concerned with the look of each hole than the playing characteristics. A variation and balance of fairway lengths and curvatures is nearly universally recognized by golf course architects as essential to keeping players interested, bringing them back for repeated rounds over time (Amick n.d., Doak 1998, Graves & Cornish 1998, Shackelford 2003).

Disc golf & ball golf in academia

Benson (2000) looked at disc golf course design from the perspective of forest recreation management in his Master's thesis in Forestry at Austin State University, taking on physical design by developing an algorithm to be applied to both (1) an actual course installation

managed by the author, and (2) a conceptual course design. Benson (2000) noted that the algorithm he developed was practical for both sites despite having dissimilar landscape typologies. Benson (2000) acknowledged the benefits of Incorporating concepts of landscape ecology (Forman 1997) and other substantive design criteria. Perspectives on disc golf course design (Dunipace 1993), recreational impact models (Manning 1979) with the aid of Geographic Information Systems GIS (Cole 1995), and human landscape psychology (Kaplan, Kaplan and Ryan 1998) are just some of the other criteria incorporated into his algorithm.

The author cited the dwindling accessible recreation opportunity for urban dwellers as a consequence of urban sprawl patterns as an impetus for recreation planners to “maintain floral structure while broadening park function to encompass both faunal needs and increased human use” (Benson 2000, p. 20). Benson found disc golf to be an appropriate activity to practically study these objectives because playing disc golf encourages its users to “explore far reaches of park spaces” (Benson 2000, p.4) that are often “misused or under used” (Benson 2000, p. 10). The itinerancy of disc golf (Benson 2000) deters miscreants, particularly in park recesses.

Landscape ecology, Benson (2000) found, could be applied to parks by themselves or in relation to their surrounding landscape; either as a an extensive, connected *matrix*, as a corridor, or as a characteristically nonlinear patch that interacts with the matrix but differs from the surrounding landscape character, depending on the scale of study (Benson 2000). Landscape ecology literature allied with landscape architectural practice affirms this dynamic notion as it would relate to course design; landscape structure influences function, or flow of natural elements, which influence the change we see over time (Dramstad et al

1996). Perforation, dissection, shrinkage, attrition and coalescence are all landscape changes that have both human and ecological implications (Dramstad et al. 1996 p. 15), and could be incorporated into a course design algorithm (Benson 2000). Forman (1997) was cited as an expert in landscape ecology in Benson's thesis to suggest that a poorly designed course could inhibit disc golfers from feeling that the park landscape has real meaning.

Benson (2000) investigated the perspectives of grassroots disc golf course design leaders to see how ball golf offered hints at better design (Houck 1998), resources to aid community designers (Kennedy 1996) and opinions of elite participants (Climo 1997) as well as the civic dynamics of volunteerism (Gittins 1993). Together these informed perspectives and others served as a checklist, or algorithm, for Benson (2000) to propose course designs that avoided conflict with other park users, mitigated vegetation damage, soil degradation and erosion, and controlled litter, while bolstering course patronage. His method reduced confusion and misallocated time in the course design process (Benson 2000). Graphic representations of his final designs were provided in the appendix of his study.

In 2002 Hugo Haley produced a thesis project for the University of Calgary that investigated the political conflicts associated with relocating a popular disc golf course in an urban park setting. By analyzing planning literature, including *Not In My Backyard* (NIMBY) syndrome research, interviewing key informants, and conducting public surveys of park users, Haley (2002) proposed recommendations to improve future recreation planning for the emerging sport of disc golf. A disc golf facility model was proposed based on effective community planning research, community consultation, participation practices and best practices for site design.

Haley (2002) suggested that the political tension between disc golfers, park users, residents and municipal officials could be related to the professionalization of disc golf as manifest in efforts to regularize disc golf course development, public education and event sanctioning. This modernist management approach, based on the rationalization of commerce and industrial production, is antithetical to the postmodernist view of recreation which rejects purity of form in favor of structures which playfully mix forms and historical styles (Rojek 1995), as Haley (2002) believes disc golf does through its simulation and imitation of ball golf. Additionally Haley (2002) suggests that Modernism's bureaucratic calculable actions make it difficult for disc golf to fit this mold because it has existed as largely unmonitored and difficult to predict.

Haley (2002) evaluated the evolution of the NIMBY concept in literature from simply the phenomena of irrationally opposing a land use near home that may have desirable societal benefits more broadly (McAvoy 1988), to a focus on deeper understanding of root causes of conflict to prevent future pitfalls rooted in stakeholder information deficit (Burningham 2000). NIMBY labeling may have been to blame for the insufficient opportunity for public involvement in the siting of the new disc golf course (Haley 2002).

Furthermore, Haley (2002) deemed it relevant to outline four major factors of outdoor recreation conflict as defined by Jacob and Schreyer (1980) and utilized these factors in part to structure his recommendations: (1) Activity Style – personal meanings and behaviors; (2) Resource Specificity – significance of a recreational resource for a given experience; (3) Mode of Experience – expectation of environmental perception of users; (4) Lifestyle Tolerance – tendency to accept or reject different lifestyles. Urban recreation conflict resolution seeks to balance the needs of all parties while ensuring the integrity of the environment, but park

management often does not understand either the needs of emergent recreational activities such as disc golf or the impacts it makes on the land (Haley 2002).

Haley (2002) cites the important difference between public participation versus consultation; which simply offers information to be reviewed not developed through involvement in the process (Roberts 1996). Planners can identify an appropriate degree of involvement by framing the flow of information, but this can be a complex problem. For example, surveys conducted by Haley (2002) found that 65% of disc golfers using the course in contention were not members of any disc golf club or organization suggesting that recruiting involvement through these clubs may not well represent the overall values of the users. Haley (2002) found that the rapid emergence in popularity of disc golf in Calgary left golfers, local residents and municipal leaders unprepared to effectively collaborate and plan.

The author goes on to suggest that as disc golf gains popularity, its participants may not be comfortable with the trappings of becoming more of a mainstream activity such as increased competitive focus and commercialization (Haley 2002). His recommendations for future course siting and development involve nudging disc golf into a modernist model of recreation by encouraging formal clubs in order to better facilitate orderly stakeholder facilitation. Haley (2002) acknowledged the dichotomy that moving to a modernist model may change the spirit of the activity which drew people to it in the first place, but anticipated that the growth of disc golf may make it inevitable. The overarching goals of his structured management recommendations aimed at both disc golfers and recreation planners were: (1) broad acceptance of disc golf, and (2) broad opportunities for participation (Haley 2002). Whether a shift in spirit and form to modernism for disc golf is necessary for its orderly growth is still in question. Specific physical course design strategies

to address the political conflicts discussed in his thesis project were not offered.

A doctoral candidate at West Virginia University focusing on human factors of the rural-urban interface wrote an unpublished research paper that looked broadly at the benefits of participating in disc golf (Sinisalchi 2005). At the time of his study, Sinisalchi (2005) estimated that 54% of American disc golf courses were in non-urban areas using Geographic Information System (GIS) data and U.S. Census Bureau statistics, marking a trend of courses emerging outside of urban areas, especially within 50 miles of urban centers. Two hundred twenty-five course stewards were surveyed online about course use, community improvement and personal reasons for playing. Course stewards are active members and leaders of local clubs or informal groups associated with particular courses who coordinate maintenance, outreach and event planning, as well as communicate with land managers. Of the courses surveyed, users/week ranged from 30 to 5,000 and averaged 250, and courses within ten miles of a city with over 25,000 people had four times the use of courses in further removed rural areas (Sinisalchi 2005). Two-thirds of courses sampled had an associated local disc golf club with an average of 44 members. Sinisalchi (2005) identified a willingness to travel as much as 50 miles when local course options were limited.

Sinisalchi (2005) corroborated his survey results with literature about the benefits of leisure (Driver, Brown and Peterson; 1991, Kaplan, Kaplan and Ryan, 1998; Ulrich 1983) to identify the benefits of disc golf to both the community and the individual, summarized on the following page:

Community Benefits of Disc Golf – categorized –

Economic

- Low cost of construction maintenance, and play
- Attracts players to the local community

Community Health

- Provides low impact and safe means of exercise for all age groups

Environmental

- Aesthetic enhancement of park (more so in urban areas)
- Low resource impacts (compared to other recreational uses)

Safety

- Crime deterrent as the park is utilized by more people

Education

- Schools may introduce the course into their curricula for physics, physical fitness, ecology, planning and other subjects

Community Involvement

- Formal and informal games and tournaments bring community members together
- Families and friends can share time together

Personal Benefits of Disc Golf – ranked most important to less important –

- Enjoy nature
- Achievement
- Escape daily routine
- Meet/observe other people
- Tranquility/privacy
- Learning & discovery
- Independence/ autonomy
- Introspection
- Nostalgia (lists adapted from Sinisalchi 2005)

Burzynski (2008) took a literary perspective, drawing significant inspiration from John Updike's classic novel on the game of ball golf: *Golf Dreams* (1996). Burzynski (2008) explored the narrative, personal, philosophical and spiritual side of disc golf with an emphasis on the life lessons one may gain through participation. Burzynski (2008) noted that without a time limit, more time could be spent during a round alone in quiet contemplation, interspersed with the drama of the game, helping to create a narrative structure. In contrast to ball golf, participants of disc golf are not trying to stop anyone and no one is trying to stop you,

encouraging a harmony not found in agonistic sports that have defense (Burzynski 2008).

The structure of the game based on rules of play, etiquette, courtesy and the honor system was found to transfer into the participant's everyday life (Burzynski 2008). In disc golf the player is constantly tested, punished and rewarded in many different ways during a round, similar to life: how we conduct ourselves in the *real world* (Burzynski 2008). With the completion of a hole and anticipation of the next hole reoriented with a new landscape contextual frame, denouement and rebirth are offered repeatedly throughout a round (Updike 1996). The act of playing disc golf, Burzynski (2008) contended, is not so much about working on the game itself, but on yourself with or against the wind, trees and the lay of the land. This process, Burzynski (2008) felt, was emblematic of our modern-day dilemma of separating subject and object. In this regard, he suggested that the technology involved with the object – golf disc design (Hummel 2003) – provides a strong physical connection with the subject – the act of play (Burzynski 2008).

Trendafilova (2011) studied disc golf subculture in order to assess the potential for grassroots sport movements to positively address environmental problems. Through field observations and the ethnographic technique of passive participant, observation at three disc golf courses in the South, she developed recommendations for managing recreational activities by employing knowledge about sport subcultures. Trendafilova (2011) asserts that cultural knowledge is crucial for discovering sustainable development solutions at the local (Milfront, Duckitt and Cameron 2006) and global level (Vlek and Steg 2007). A people-oriented approach focused on values and beliefs of subcultures serves to deconstruct concepts associated with parent cultures and describe internal structures as new sources of

identity (Trendafilova 2011) .

Donnelly (1981, 1988) believed we should view the process of socialization into subcultures as a deliberate act of identity formation, and Wheaton (2004) believed the subculture settings of lifestyle sports enhanced the ability to acquire knowledge about member characteristics. By discovering the shared values and beliefs of disc golfers, Trendafilova (2011) was able to analyze the how the disc golf experience could be harnessed to leverage desired behavior, referencing social marketing techniques aimed at sport subcultures (Andreasen 2006).

Five themes emerged from her study (1) lack of knowledge and awareness about the surrounding environment, (2) sense of ownership and attachment to the park they play in, (3) willingness to donate time as volunteers, (4) family and fun-oriented atmosphere, and (5) male-dominated sport (Trendafilova 2011). Little research in gender construction has been performed in emerging sports such as disc golf (Anderson 1999) and how values differ between genders. Trendafilova (2011) believes disc golf offers an opportunity to study gender issues in emerging sports with an eye towards shaping future trends, citing the late growth of female participation in snowboarding (Thorpe 2005). Gender gap studies about environmental concern (Bord and O'Connor 1997) show that females are often more in tune with environmental problems and Trendafilova (2011) suggests that increasing female participation may offer a strategy for making disc golf a more sustainable activity by raising subculture awareness of environmental issues. Sense of community was found to be highly valued and Trendafilova (2011) observed that these values translated into feeling a group sense of home attached to the park where they played, and a willingness to volunteer time to protect its character, suggesting the potential for environmental stewardship. While the

general “anything goes” attitude of the subculture encouraged a playful atmosphere, Trendafilova (2011) believed this attitude was not conducive to environmental stewardship.

Disc golfers in Trendafilova's study highly valued being engaged in natural settings but did not understand their impacts. This suggests a high potential for introduced signals and cues as a form of education, to have a positive effect on environmental awareness. Stern (2005) revealed that increasing awareness about consequences of one's actions upon something highly valued can motivate behavioral changes. This dissertation asserted that the maintenance of desired environmentally friendly behaviors over time based on intrinsic motivations of emerging sport subcultures such as disc golf is the motivation to conduct similar studies of specific activities and regions (Trendafilova 2011).

One historical perspective on how culture uses landscape form helps to frame the social findings of Trendafilova (2011) for spatial analysis. Noted scholar of the American landscape J.B. Jackson (1980) has examined the concept of landscape as theater from 17th Century Europe, where dramatic social productions can occur in a well defined space and contribute to group identity. He observed that the role of nature in this place-based theater was that of a background for the myth and magic that supported cultural objectives, not a desire to understand the processes (Jackson 1980). Perhaps modern disc golf courses are uniquely positioned to bridge nature and culture?

CHAPTER 2: LITERATURE REVIEW

Overview

There is significant literature about the evolving form and function of urban parks. There is also substantial literature about the leisure and recreation movements that looked to forms of programmed public park space to address societal ills and to enhance the general well being of urban populations (Ibrahim 1989). The planning, development and physical design of parks or open space systems did not necessarily match the objectives of these movements. By the late 20th Century, programmed outdoor recreational and leisure resources had widely failed to meet users' needs (Cooper Marcus & Francis 1990, Gold 1974, French 1970). Alongside this lackluster inventory of park space, new, alternative sports (Rinehart 1999), or lifestyle sports (Wheaton 2004) emerged that began to appropriate both existing park space and other parts of the urban public realm for their activities (Lefebvre 1992, Rojeck 1996, Rinehart and Sydnor 2003).

This literature review outlines historical trends in urban leisure recreation movements, the actual forms the spaces have taken where activity occurs, characterized by typologies, and reviews prominent scholarly investigations into the role of leisure in culture as it relates to the function of the public realm. The concepts of *play* and *flow* will then be reviewed in the context of leisure cultures, followed by a review of physical landscape design principles that are specific to how people move through naturalistic outdoor spaces. The psychological relationships between leisure trends, behavior and current form have often been studied separately but not synergistically. Lifestyle sports are now broadly discussed in academia as cultural phenomena, but rarely have they been investigated in order to understand the typologies of spaces in which they are likely to thrive. Finally, this literature review outlines

the continuum of scholarly thought about the blurring of our urban-suburban landscapes and the opportunities to recognize post-industrial underutilized spaces as waste “dross” spaces. Much of the subject matter to be discussed in the fields of study mentioned above have yet to be applied to the concept of *dross* and prompts independent investigation by landscape architecture professionals that also considers scholarly efforts to understand how people relate to outdoor leisure settings as they move through them.

A Landscape architecture study of emerging lifestyle sports such as disc golf requires understanding leisure through its psychological, behavioral, cultural and spatial purposes in society over time. This is an interdisciplinary endeavor that can seem overwhelming but review of literature from several fields of study begins to reveal recurring themes relevant to current trends that can inform rational typological design strategies. In order to tie these themes together and relate them to principles of human-based environmental design, the broadest historical and conceptual scholarly perspectives will be considered first, along with relevant critiques, followed by a survey of increasingly specific and contemporary trends in leisure recreation.

Leisure, play & the public realm

Work and leisure

The roots of modern conceptions of *leisure* date back to Aristotle, who believed that freedom from having to be occupied was the basis of happiness, by having time to exercise our unique human trait of reason (Simpson 1989). Aristotle asserted that non-utilitarian modes of inquiry (contemplation), were the basis for happiness and related to the purpose of early philosophical study. Our word *school* derives from the ancient Greek *schole* which meant a *state of being free from necessary work* (Simpson 1989).

Advancing to the industrial era, specialized or professional work and labor are the ordinary ways in which humans participate in the world in order to meet basic needs. As a post-World War II philosopher with a fresh perspective on industrialization's effect on culture, Josef Pieper (1952) wondered if human existence could be optimized, bringing fulfillment exclusively through work. In this proletarian, utilitarian context, leisure was morally viewed as unseemly *laziness, idleness and sloth* (Pieper 1952, p. 43). Pieper (1952) holds that culture misconstrued these notions of non-activity as leisure, whereas forms of tranquil silence can be understood as a state that affords a celebration of the world as other-than-everyday life in order to affirm a higher order: meaning and oneness with the universe. Pieper (1952) goes further to distinguish forms of non-work from genuine leisure by stating that a break in one's work is still part of the world of work if its primary purpose is solely to refresh for more work. Alternately, leisure "runs at right angles to work" (Pieper 1952, p. 49), through absorption in the eternal now referred to as *intellectus*, and a counterpoint to *ratio*, based on real time. In today's secular world, spaces of ritual apart from work take many forms but as Pieper (1952) describes, the religious temples of divine worship were originally the setting for genuine leisure because they marked off land not to be used for agriculture or habitation, allowing connectivity to a higher order apart from the utilitarian life.

The idea that leisure is associated with contemplation – not diversion – and is what we receive from culture, while work is what we give was discussed by Josef Pieper (1963) in his essay *Leisure and its threefold opposition*. Pieper (1963) asserted that leisure fosters the capacity to receive the reality of the world so we may look beyond the limits of our social station without exhausting ourselves. "The strange propensity toward hardship that is engraved into the face of our contemporaries as a distinct expectation of suffering" (Pieper

1963, p.139) speaks to Pieper's contention that our modern ability to give has been impaired by our diminished capacity to receive.

Public realm & leisure

Richard Sennet (1977), an urban historian, evaluated the rapidly emerging urban public realms of 18th Century Paris and London as ritual spaces of leisure as a diverse industrial-based proletariat coalesced from rural lifestyles looking for gainful work in new urban agglomerations. In *The Fall of Public Man* Sennet (1977) describes a past where citizens adopted roles as public actors who had no qualms about receiving cultural input which allowed for a vibrant, creative public life. In 17th and 18th Century London and Paris, family life was much simpler and less distinction was made between children and adults, including how they played. The vibrant public life Sennet (1977) describes during this time – *Ancien Regime* – where divinity found expression privately in the natural simplicity of family life, was acted out like a grand, complex play – *Theatrum Mundi* – in streets, cafes and theaters. An elaborate interchange between strangers could take place because social masks allowed engagement: “Masks permit pure sociability, detached from circumstances of power, malaise, and private feeling of those who wear them” (Sennet 1977, p. 264).

By the 19th Century, public life and leisure had evolved into a culture of spectacles whereby taking the role of passive spectator served to shield a complicated private experience from the world (Sennet 1977). The ability to play-act had been lost due to the impact of industrial capitalism which blurred distinctions between the proletariat and bourgeois lifestyle, while public life was increasingly commodified by business interests (Sennet 1977). Self-conscious doubt supplanted self-distance, and life in public suffered a

lack of plastic complexity (Sennet 1977). The setting aside of intimate desire, need and identity are, Sennet (1977) argued, the hallmarks of the childhood play experience because it allows children to adjust the quality of the rules by which they play. The big idea is that stepping away from immediate desire or instant gratification permits people to play together. When children play games together, according to Sennet (1977), rules as principles of action are consciously agreed upon and become increasingly complex in order to prolong resolution while increasing play opportunities. Rule-structured play therefore has the ability to energize participatory expression in leisure activities. Having malleable rules creates a fiction of initial equality of powers and maximizes participation. In this way, play makes fear of frustration subservient to the desire to take risks (Sennet 1977).

“Play in a game has instantaneous meaning because the rules exist” (Sennet 1977, p. 321). Sennet (1977) makes the case that the adult public play-actors of the *ancien regime* were willing to take risks because the sophisticated social structures of the time gave them the self distance they needed to control expression as well as repeat it. Their rules of discourse in the cafes permitted free flow communication between people of unequal rank, creating a momentary social fiction that secluded the play realm as an alternative reality (Huizinga 1938). Socialization occurs with children when they explain to newcomers the whole history of how the present rules came about, including provisions for handicaps. Both Pieper (1963) and Sennet (1977) agree that narcissism prevents participation in anything outside of the self, such as impersonal relationships, because the narcissist is incapable of receiving handicaps from others. In this way the energies of play and narcissism are contradictory (Sennet 1977).

Modern norms of society's focus became sharing feelings/impulses as a reflection of self

instead of sharing common activities, forcing adults to act accordingly if they want to fit in. Sennet (1977) believes modern immutable bureaucratic work structures erase boundaries between self and the world because jobs that employees hold have power in their potential not their actions, destroying an ability to challenge rules in their passive state. When the idea of transcendent nature that once resided in family life was lost, humans came to believe that every event in life must have self defining meaning, destroying the importance of impersonal interaction in public (Sennet 1977): "The extent to which people can learn to pursue aggressively their interests in society is the extent to which they learn to act impersonally. The city ought to be the teacher of that action, the forum in which it becomes meaningful to join with other persons without the compulsion to know them as persons" (Sennet 1977, p. 340).

American historian and social critic Lasch (1979) praised Sennet's (1979) arguments on the importance of self-distance in play and in the dramatic reconstruction of public reality, but critiqued his characterization of relationships between classes. Lasch (1979) comments that Sennet pays too little attention to the ability of ruling classes to exploit their subordinates' material deprivation as guilt while believing their own material interests are in line with mankind as a whole. In this light Lasch (1979) notes that men have always projected irrational aspects of themselves into the political realm. Lasch (1979) makes a semantic distinction that benefiting from participation in public life or leisure by learning to receive more than to give is a "dubious equation" (Lasch 1979, p. 29) because it pigeon-holes rapacity as the only alternative to narcissism.

In an age of diminishing expectations, leisure has continued to be defined primarily as an escape from everyday life and Lasch (1979) acknowledges that the playing of games raises

awareness to a high level of concentration without the side effects of other distractions such as drugs or alcohol. Pieper's (1952) conception of leisure as a basis for culture is based on the assumption that humans find their place in the universe through the contemplation it affords, and Sennet's (1977) emphasis on play leads us towards a review of games and sports as new forms of leisure activity. Lasch (1979) observes that the perceived value of games to social reformers is the essence of their appeal, and that this attraction quickly fades when forced into the service of education, character development or social improvement. Lasch (1979) contends that we seek intellectual and physical demands in playing sports that we no longer find at work.

Before reviewing the arguments of Huizinga (1938) about the human imperative to play, outlining the modern critique of sport as spectacle by Lasch (1979) draws some interesting counterpoints with the 19th Century emphasis on spectacle events dominating public life noted by Sennet (1977). Lasch (1979) argues that players in spectator sports not only compete but they act out a familiar ceremony that reaffirms common values understood by the audience. Unlike Sennet (1977), Lasch (1979) does not see spectatorship as being a passive endeavor, because by watching masters of a game we are able to measure ourselves against the players. Lasch (1979) points to the glorification of amateurism and the deploring of competition as a type of fake radicalism of the counterculture that attempted to break down an elitist distinction between players and spectators. On the other hand, Lasch (1979) illustrates how athletics become trivialized when the conventions of a game break down as players, promoters and spectators alike, influenced by extrinsic market forces, lose too much of the seriousness of purpose cooperatively required to maintain the sense of reality that genuine play requires (Huizinga 1938). The attempt to set up a separate sphere

of leisure apart from the reality of work and politics is driven by a desire to comment on this reality, not escape from it (Lasch 1979).

Play and leisure

Narrowing the focus to disc golf as a subculture and as a contemporary leisure sporting trend that is one of myriad forms of alternative recreation to emerge out of the counterculture movement of the 1960's (Lefebvre 1992) supports informing landscape design choices for courses. This first requires a cursory understanding of the evolution of the nature of play in sport and society. Play is a very broad, well studied subject that spans disciplines such as psychology (Millar 1968) and child development (Piaget 1962), but themes related to games, sport and rule-making find particular relevance to the phenomenon of disc golf through the works of a handful of scholars from pre-World War II into the 21st Century (Callois 1961, Gordon & Esbjorn-Hargen 2007, Huizinga 1938 and Sutton-Smith 2001). Efforts to model play as an integral yet ambiguous aspect of sport can suggest how contemporary urban spatial patterns (Berger 2006, Beveridge 1995, Jackson 1999, Jacobs 1961, Whiston-Spirn 1984) may accommodate disc golf as a lifestyle sport (Wheaton 2004) to optimize leisure experience of the landscape (Appleton 1975, Cooper-Marcus & Francis 1990, Csikszentmihalyi 1990, Hester 1975 and Kaplan, Kaplan & Ryan 1998).

Huizinga (1938) may have disagreed with the musings of Lasch (1979) based on his historical and cultural anthropological perspectives on play as influenced by the earnest structures of business and directed purpose. To his mind, earnest endeavors could not be characterized as playful, but genuine play could certainly have elements of seriousness (Huizinga 1938). Huizinga's work *Homo Ludens: a study of the play element in culture* (1938) which asserted the primacy of humans as players (*ludic*) for developing culture alongside

human reasoning (*sapien*) suggested that a true play environment conducive to maximizing community well-being required a crucial, yet ambiguous balance between frivolity and seriousness that has been lost to adults since 19th Century industrial trends. The peak of vibrant public life in the western world of the 18th Century explained by historical urbanist Richard Sennet (1977) comes into semantic, temporal and cultural agreement with Huizinga (1938) through the term *play-acting*.

Play is irrational. Humans as *Homo Sapien* will reason that the mechanical exercises of children can alleviate superabundant energy, offer relaxation after exertion or provide training for the demands of life, but Huizinga (1938) argued that the intensity and absorption we observe in primordial play is without logical biological basis. Instead the perennially difficult to define fun of playing only becomes possible when the mind (*intellectus*) breaks down the deterministic matter (*ratio*) of our surroundings so that it is perceived differently from ordinary life (Huizinga 1938, p. 4). Children simply play because they enjoy it, but to adults who reason that it is superfluous – never imposed – it always happens during “free time” (Huizinga 1938, p. 8).

Huizinga (1938) also describes play in terms of aesthetics. Of the qualities that make something beautiful such as tension, poise, balance, contrast, variation, solution and resolution, the uncertainty of tension is most important to play (Huizinga 1938, p. 11). Rules establish fair-play in the presence of tension which emerges from the contest for something or the drive to represent something in search of admiration. Spoil-sports destroy play by not agreeing to the rules but can sometimes initiate separate play groups with new rules (Huizinga 1938).

Contests, like all other forms of play, have no purpose in the sense that they begin and end

within themselves and the outcome is not necessary for the life-processes of the group. Nevertheless, the esteem, or honor, one garners from winning accrues as a benefit to the whole group in genuine play because there is a mutual understanding that continued virtuous participation in the group will eventually produce reciprocal admiration (Huizinga 1938). Huizinga (1938) supports this notion from an anthropological perspective citing the ubiquitous existence of antagonistic social life in archaic cultures where friendly assistance from rivals was part of a dualistic continuum of structured ceremonies. Without tension there can be no elation (Huizinga 1938).

Like adult sport the marking out of some sacred spot is also the primary characteristic of every sacred act: "The turf, the tennis court, the chess board and the pavement-hopscotch cannot formally be distinguished from the temple or the magic circle" (Huizinga 1938, p. 20). Huizinga's contention that play is older than civilization related to his stance that a modern state of finely organized production and social life have smothered cultures which arose from play with rules too serious for agonistic ritual. Huizinga (1938) observed that since the late 19th Century, rules for sport have become increasingly strict and elaborate in part due to incessant record keeping and measuring. This has led to a sharp distinction between amateurs and professionals, ranking some inferior to others as players. Professionals now lack spontaneity and carelessness: there is no longer play or earnestness in their athletic endeavors. Sport has become profane: the ritual tie was completely severed from the structure of society (Huizinga 1938, p.197-198).

The emergence of lifestyle sports (Wheaton 2004) will be presented shortly as a postmodern response to the atrophy of ritual play in modern life described by Huizinga (1938). The case of beach volleyball shows that the dynamics of leisure, culture, play and the

public realm as outlined above have everything to do with the rise and/or fall of emerging alternative sports. As the rules and the rituals for beach volleyball were completely re-ordered to position the game as a global commodity and Olympic Sport in the late 1990's, the pure play element of the game disappeared and with it the social activity on the ritual grounds where the culture took shape (Burke 2008).

As a transition to more contemporary views of play, leisure and sport which critique some of Huizinga's ideas, a direct quote from *Homo Ludens* summarizes the essential characteristics of a "playground" providing a point of transition into postmodern conceptions of play: "It is an activity which proceeds within certain limits of time and space, in a visible order, according to rules freely accepted, and outside the sphere of necessity or material utility. The play-mood is one of rapture and enthusiasm, and is sacred or festive in accordance with the occasion. A feeling of exaltation and tension accompanies the action, mirth and relaxation follow" (Huizinga 1938, p. 132).

French sociologist Roger Caillois (1961) sought to further model forms of play that apply to social structures and various elaborate forms of games. Caillois (1961) largely agreed with the findings of Huizinga (1938) as evidenced by the similarity of intent in his own play model:

- (1) Free, or not obligatory
- (2) Separate from routine life occupying its own time and space
- (3) Uncertain, results cannot be pre-determined and player's initiative is involved
- (4) Unproductive in that it creates no wealth and ends as it begins
- (5) Rules that suspend ordinary laws/behaviors and must be followed
- (6) Involves make-believe that confirms for players the existence of imagined realities set against real life

(Caillois 1961)

Nonetheless, Caillois (1961) believed the difficulty in defining play further was exacerbated by Huizinga's emphasis on competition in play. In this respect Caillois (1962) observed that Huizinga (1938) was too narrow in his definition of play and offered his own four play forms:

AGON (competition) – Chess is an example of an almost purely agonistic game

ALEA (chance) – Roulette is an example of an almost purely aleatory game

MIMESIS (mimicry) – Role Playing

ILINX (vertigo) – Altering perception; taking hallucinogens, roller coaster, spinning

(Caillois 1961)

Conversely, Caillois (1961) believed Huizinga (1938) was too broad in his definition of play when he described mysteriousness and secrecy as vital to play and cultural formation, believing he was forcing play into the deservedly distinct domains of sacred and institutional (Caillois 1961). According to Caillois (1962) each of these play forms could be placed on a continuum from *ludus* – structured play activities (games) with explicit rules, to *paidia* – unstructured and spontaneous activities, in the form of playfulness. The shifting of play forms within this continuum helps to account for the creation and re-creation of rules manifest in the instability of subcultures (Caillois 1961).

Sutton-Smith (2001) concedes that definitions of play can never be proven scientifically. In order to open our imaginations to a deeper understanding of play through metaphor, he suggests that the enormous variability in nature can help us model an expansive range of play possibilities. Sutton-Smith (2001) posits that the quirkiness, redundancy and flexibility which are the keys to evolution also may be the biological basis of play because survival depends on the variability of an organism in the face of “rigidifications” (Sutton-Smith 2001, p. 223). Sutton-Smith (2001) deconstructed play theories and linked them to what he called

the rhetorics of play: play as power, play as self, play as identity, play as frivolous, play as progress, play as imagination, and play as fate. This approach is based on a belief that play must be interpreted in all of its forms, across all disciplines.

Gordon and Esbjorn-Hargens (2007) defined and mapped the widely varied forms of play across disciplines to devise an integral model giving some sense to the levels of play experience. The dimensional diagram (Figure 17) organizes the four play forms of Caillois (1961) so that they are each associated with the seven rhetorics of Sutton-Smith (2001). A third layer of the diagram devised by Gordon and Esbjorn-Hargens (2007) naming four essential features of play as headings helps to further organize the “playground”. One prominent theme identified by Gordon and Esbjorn-Hargens (2007) through their survey of play research is that true childlike play maximizes participation by creating more opportunities for play. By playing with the rules and structure themselves, as play researchers they hope their integral model can express the adaptability of adult play to its range of contemporary forms.

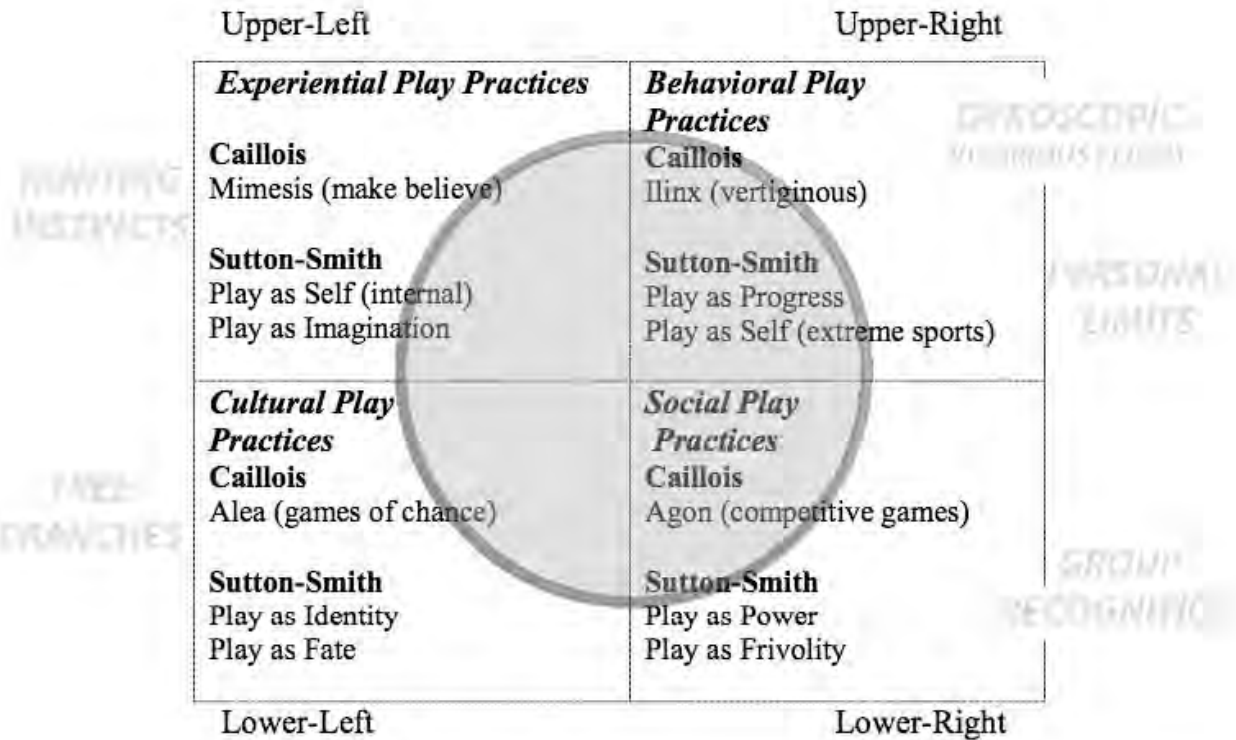


Figure 17. Caillois forms & Sutton-Smith rhetorics within quadrants & disc golf relevance

Experiential Play Practices are a subjective dimension of the players, including feelings and impulses that arise through play. Behavioral Play Practices occur within the individual player and include the actions of play such as running, jumping or thinking. Cultural Play Practices are the intersubjective cultural contexts of play in overlapping layers of mutual understanding, language and meaning, including symbols, narratives and ethics. Social Play Practices are the “interobjective” structures of play where the parts create a whole; the ecological and social systems that make up the rules defining, supporting or inhibiting play (Gordon & Esbjorn-Hargens 2007).

Gordon & Esbjorn-Hargens (2007) further categorize and analyze specific forms of play

activities including games and sports based on this layered model. It is a useful construct to apply to the leisure phenomenon of disc golf in different settings because we begin to see how the recreational activity can be defined by borrowing elements from each quadrant of Figure 17 as represented by the light blue color as an adaptation to the original diagram.

Csikszentmihalyi (1990), has coined the term “flow” to describe positive aspects of the human experience – joy, creativity and the process of total involvement. He uses the Experience Sampling Method to achieve greater precision in measuring human experience beyond interviews and questionnaires (Csikszentmihalyi 1998, 1990, Csikszentmihalyi & Csikszentmihalyi 1988, Csikszentmihalyi, Getzels & Kahn 1984 and Csikszentmihalyi & Bennet 1971). The technique involves “asking people to wear an electronic paging device for a week and to write down how they feel and what they are thinking about whenever the pager signals (8 times /day)” (Csikszentmihalyi 1990, p. 4). Through this method he has collected over 100,000 cross-sections of experiences from all over the world, providing a first-hand qualitative data-set that corroborates and expands on the historically, psychologically and anthropologically based concepts of the play/leisure theorists mentioned above.

Csikszentmihalyi (1990) explains that work settings produce more flow experiences than contemporary settings of leisure. His phenomenology of enjoyment describes eight elements found to contribute to flow in any setting (1) Chance of completion, (2) Concentration on task, (3) Task with clear goals, (4) Task with immediate feedback (5) Deep but effortless involvement removed from everyday life, (6) Sense of control over actions (7) Concern for self disappears yet sense of self is stronger after completion of a task, and (8) Altered sense of time (Csikszentmihalyi 1990, p. 49). Given these findings we can understand the following in regards to leisure and the tendency towards atrophy, especially

in the form of television watching: “Leisure provides a relaxing respite from work, but it generally consists of passively absorbing information without using any skills or exploring new opportunities for action” (Csikszentmihalyi 1990, p. 68-69). The result of this type of passive leisure is anxiety without an outlet as opposed to the tension and doubt that motivates engagement in flow activities (Csikszentmihalyi 1990).

People engaged in flow activities feel stronger, more active, creative, focused and motivated than those involved with passive activities (Csikszentmihalyi 1990). Although it was found people yearn for it, unstructured free time today largely lacks the built-in goals, feedback rules and challenges more often found in work settings (Csikszentmihalyi 1990). Ultimately, consciousness (*alluded to above in element #7*) – is the driver of flow experience and is predicated on an ordered state of mind (Csikszentmihalyi 1990) by way of combinations of the other seven elements listed.

The four play forms (Caillois 1961) listed above were recognized by Csikszentmihalyi (1990) as useful categories for understanding how we go beyond the boundaries of ordinary experience through games to achieve consciousness in many ways. **Agon** is discussed as the primary form of most competitive sports where the latin root of “compete” is defined as “to seek together” in order to actualize potential when forced by the skill/effort of an opponent (Csikszentmihalyi 1990). Csikszentmihalyi (1990) notes that when extrinsic goals such as beating the opponent or impressing an audience become the focus instead of the activity itself, competition is likely to become a distraction rather than a reason to focus consciousness. In the game of golf as a play form, the player can choose whether to compete with him/herself, with others, or to de-emphasize the **agon** (Doak 1998, Houck 1998b). Depending on the emphasis, disc golf can also express qualities of **alea** – chance, **ilinx**

– vicarious spinning – and **mimesis** – fantasy.

No matter the form of activity, Csikszentmihalyi (1990) conveyed that the sum of his research revealed commonality to any form of flow experience such that “It provided a sense of discovery, a creative feeling of transporting the person into a new reality. It pushed the person to higher levels of performance, and led to a previously undreamed-of state of consciousness” (Csikszentmihalyi 1990, p. 74). Figure 18 on the following page is an adaptation of a “flow channel” diagram developed by Csikszentmihalyi (1990) to illustrate how complexity spurs the growth and discovery associated with higher consciousness. The diagram – modified to represent disc golf – shows that one cannot enjoy the same thing at the same level for long without becoming either bored or frustrated, while the desire to get back into the flow pushes us to expand our skills or find new ways of using them (Csikszentmihalyi 1990). Failure to achieve both the former and the latter often causes attrition from the activity.

In light of disc golf's often cited benefit of being a low-impact, inexpensive and sustainable activity (Benson 2000, Sinisalchi 2005), Csikszentmihalyi's (1990) finding that participation in expensive leisure activities – in terms of required outside resources such as equipment or utilization of high British Thermal Units (BTUs) such as boating – resulted in significantly less happiness than participation in inexpensive leisure Csikszentmihalyi (1990). Csikszentmihalyi (1990) explained that inexpensive activities often require few resources but demand investment in psychic energy, while expensive, resource intensive leisure often requires less attention and consequently offers less memorable rewards.

The work of Csikszentmihalyi (1990) brings us full circle in our review of leisure theory (Pieper 1952), the function of the public realm (Sennet 1977), the function of sport in

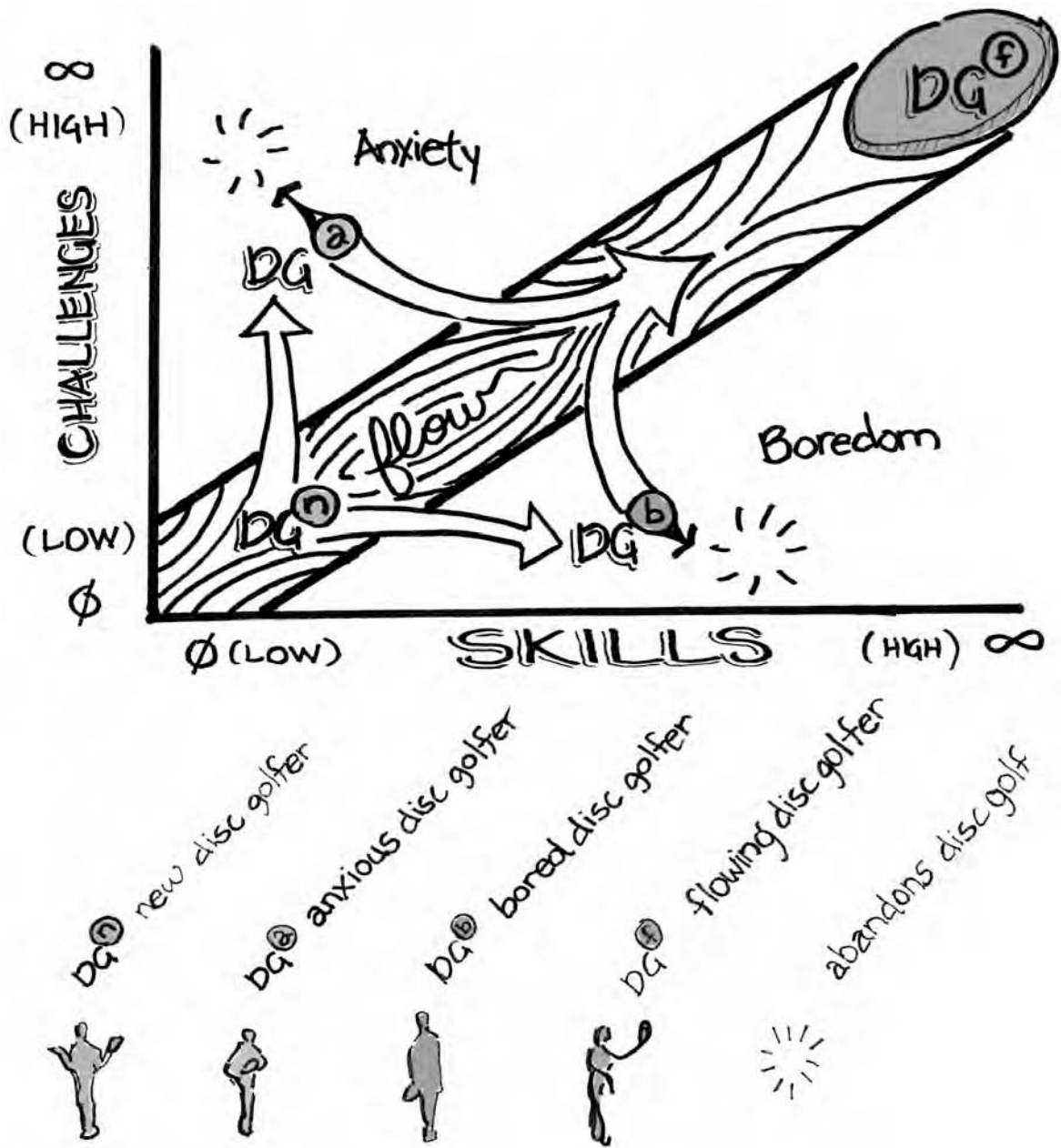


Figure 18. Disc golf flow channel diagram

society (Lasch 1979), play as the basis for culture (Huizinga 1938) and play as an ambiguous form of behavior (Caillois 1961, Gordon & Esbjorn-Hargens 2007 and Sutton-Smith 2001) with a psychological focus on how self-consciousness relates to optimal experience or *flow*. Sennet (1977) was concerned with a flagging public life plagued by citizens who were

hyper-sensitive about sharing pieces of themselves and saw the genuine play of children as a model for cobbling order out of chaotic internal lives. While Sennet (1977) suggests that people can re-enter the public realm by donning the masks of civility as play-actors akin to the *ancien regime*, Csikszentmihaly (1990) affirms through his research that temporarily forgetting who we are can be very enjoyable because it is in these moments that we have a chance to expand the concept of who we are by ordering complexity. As we are concerned about the nature of the *flow* experience in leisure recreation to inform disc golf course design, it is the definition of play forms – pioneered by Caillois (1961) – that will help us design play-savvy courses in tune with the cultures and psyches of disc golfers.

Leisure & recreation movements

Leaders in recreation and leisure since the late 19th Century emphasized the hard-to-define nature of play as a key ingredient for addressing societal ills (Ibrahim 1989). Jane Addams, who pioneered the *Playground Association of America*, saw recreation as more than a sport but rather as a wellspring of creativity and democratic citizenship (McBride, 1989). Addams focused on outdoor urban recreation to address accessibility in cities. Joseph Lee, who was discouraged by the gang-life in parks at the turn of the century, was influenced by Froebel and child development, and believed in self-education through play (Sapora 1989). Luther Gulick, the little known co-inventor of basketball, developed the game to be interesting to spectators, easy for beginners to have fun, a great opportunity to showcase skill and an activity that would hold interest year after year (Ford, 1989). Gulick felt that play was an *attitude* (Ford 1989). Throughout the first half of the 20th Century, Lebert Weir revolutionized the idea that open space and recreation needed to be united under the

premise that man is essentially an outdoor animal (McLean 1989). Weir was among the first to advocate for open-space preservation, active recreation in scenic parks, nature study, consideration of special needs populations and broadening leisure opportunities to include creative, intellectual and artistic pursuits (McLean, 1989). Huizinga (1938) and Sennet (1977) two historic sociologist/philosophers, suggest that our inability to play as adults diminishes our civic roles in society, supporting the idea that play is the missing link between child and adult recreation planning.

The social and psychological ideals espoused by these leaders needed to take place in physical settings and Frederick Law Olmsted pioneered the idea that urban open space could be designed to meet such needs (Beveridge 1995). Frederick Law Olmsted's Central Park design is half outdoor recreation and half naturalistic landscape (Hester 1984). His park planning concepts became viable solutions to immediate problems shared by many cities. Olmsted defined the needs of the users in the late 1800's as recreation and the opportunity to experience nature in the city (Beveridge 1995). While Olmsted encouraged the interaction of all classes, the bifurcated society of his day lacked common values between classes, where the elites came to maintain that the park was the only legitimate public open space and the poor desired informal settings closer to home in the form of street corners, local bars and local playfields (Hester 1984).

These pioneers of recreation and leisure laid the foundation for the designer's responsibility to the user's needs and the collective public good, secondary to private interests, including property rights (Hester 1984). Guggenheimer (1969) believed place-based studies of unique values and mores can help prevent leisure misuse.

Guggenheimer (1969) took an interdisciplinary perspective on recreation provision in

New York, asserting that because city centers are so concentrated, diverse and complex, that they should be the center stage for needed research that can inform suburban design.

President Herbert Hoover emphasized the importance of leisure to our society when he said "Our stage of civilization is not going to depend upon what we do when we work, so much as what we do in our time off" (In Guggenheimer 1969, p. 21).

Guggenheimer (1969) chronicled our historically confused efforts to design appropriate recreational facilities, which have too often emphasized endurance, rather than service.

"We may be underestimating the inarticulated needs of people who know they want something, but don't know exactly what they do want" (Guggenheimer 1969, p. 29). A lack of objective measures points to the importance of trial and error in design (Guggenheimer 1969). Spatial planning standards such as 1/acre per 100 people for outdoor recreation in cities is confounded by many variables such as level of private recreation services, indoor facilities, accessibility and level of cultural events (Guggenheimer 1969). Each site and region must be evaluated independently for strategies of development that recognize how highway construction, street-widening, and defunct industrial land uses create "strips, gores and triangles of varying degrees of usefulness" (Guggenheimer 1969, p. 57).

Urban pattern & leisure design

At this juncture of the literature review we have considered the evolution of the human species as a social animal that strives for optimal experiences through leisure and noted how we tend to behave in the public realm. Csikszentmihalyi (1990) discovered that to achieve flow experiences we must continually re-invent ourselves; order our consciousness to fit the

times. We have touched on the importance of the play concept to pioneers in recreation and leisure facing the maw of the industrial revolution (Klein 2007) and how Guggenheimer (1969) evaluated their challenges from an interdisciplinary perspective. As the focus of this review shifts from the human animal to the urban pattern that is our habitat (Beatley 2010), it is appropriate to make the transition by revisiting the founder of a new discipline that fit the times. The urban stage from which alternative, lifestyle sports like disc golf would emerge – out of a 1960's counterculture movement – was also set by a zeitgeist that championed leisure ideals of the time.

Redefining suburban

Frederick Law Olmsted championed and pioneered the idea that everyone in our society should have an equal opportunity to escape the oppressive, de-natured milieu of city life (Beveridge 1995) at the height of the industrial revolution in the mid to late 19th Century. His philosophy was born of cultural observations and years of writing about the inequalities of the South, coupled with the lack of access to the rejuvenating power of naturalistic landscape settings which he experienced most fully in his trips to England to study their picturesque landscape traditions (Beveridge 1995). Central Park was his seminal masterwork, where New Yorkers of all ilks could experience the “narrative power of scenery” through “unconscious or indirect recreation” (Beveridge 1995, p. 36). Olmsted was not interested in designing spaces for organized sports as a means to address the oppressiveness of city life: “the remedy and preventative cannot be found in medicine or in athletic recreations but only sunlight and such forms of gentle exercise as are calculated to equalize the circulation and relieve the brain” (In Beveridge 1995, p. 38).

Olmsted's career in the emergent field of landscape architecture coincided with the first

large scale American movement towards suburban development (Beveridge, 1995). In the late 1800's it promised a great opportunity for social advance. Olmsted advocated for securing an adequate amount of space for recreation, safeguarding scenic areas for use by all residents, while roads should adhere to the contours of the land. The clear delineation of residential areas/recreation grounds which was an attempt to "ruralize our urban populations and urbanize our rustic populations" (Beveridge 1995, p. 116) presaged the shape of the suburban boom of post World War II fueled by the Federal Highway Act, automobile industry and a growing human labor force (Corbin 2001). As explained by Jackson (1987), a mass marketing campaign to go back to our 'country roots' became the homogenous suburban communities that were family-oriented and auto-dominant; served by commercial strip development and the zoning of singular land uses. A one-dimensional rural appearance became valued (Jackson 1986). Suburbia became the ideal place for the structured form of athletics which Olmsted questioned.

On the other side of the coin, preeminent urban critic Jane Jacobs (1961) had an acute understanding of the large city centers from which people were fleeing in search of the idealized lifestyles on the fringe of urban agglomerations. Long blocks, destruction of old buildings replaced with blank walls, a lack of 'eyes on the street' and general obliteration of fine grain urban texture that added character to life in public space, were all part of the physio-cultural dynamics of mid-century american cities identified by Jacobs (1961).

The post-World War II homogenous communities that developers created by employing mass production strategies and using standardized designs with little variation (Jackson 1985) have since been contrasted with the stereotype of central cities as dangerous places of poverty and decay (Beauregard 2003). Hanlon, Vicino and Short (2006) suggest such

dualisms no longer apply as evidenced by the more subtle urban realities that are revealed by the fine-grain place-level data they studied in specific parts of metropolitan areas. Their results suggest: “the traditional 'city-suburb' divide no longer suffices as a standard measure of comparison. We have identified poor suburbs, manufacturing suburbs, Black suburbs and immigrant suburbs which undermine the simplicity of the traditional model” (Hanlon, Vicino & Short 2006, p. 2140).

Irwin and Bockstael (2007) have affirmed the complex nature of horizontal urban patterns – urban sprawl – by identifying increasingly fragmented land and the heterogeneous character of places. Irwin and Jayaprakash (2009) called for a new comprehensive framework for modeling urban spatial dynamics utilizing both bottom-up and top-down models, inductive and deductive approaches that link individual micro-behavior to larger emergent patterns. The “spatial patchiness” of residential urban pattern across multiple scales noted by Anas, Arnott & Small (1998) can be explained by micro-scale decisions based on race, income or neighborhood quality in conjunction with dynamic feedbacks at higher scales. “When new behaviors arise at large scales from interactions between parts at small scales, they are deemed emergent” (Anderson 1972 in Irwin and Jayaprakash 2009, p.1233). If the larger trend of disc golf course proliferation continues there will be challenges to finding space to site them near population centers in a complex urban matrix, and understanding the small scale behaviors of users would be the deductive component of the model promulgated by Irwin and Jayaprakash (2009).

Bluestone and Harrison (1984) famously chronicled the “Deindustrialization of America” while demonstrating that the dismantling of basic industry would change the way we live and work. Within this context, designers of public parks and recreational facilities have

struggled to equitably devise appropriate settings for leisure. Gold (1972) was interested in underutilized parks, observing that despite ostensibly favorable conditions such as excellent weather and convenient access, neighborhood parks were not well adapted to modern life, which could have a serious impact on the surrounding urban form and function. Jere French (1970) professor emeritus of landscape architecture at Cal Poly Pomona, offered his take on the “decline and deterioration of the American city park” in an article for *Parks & Recreation Journal*. Outdated park facilities that remain in disrepair remind us that elements from each of the four major periods of American park development since Central Park in New York – *pleasure ground, reform park, recreation facility and open space system* (Cranz 1989) – are today manifest in a hodgepodge of typologies (Cooper Marcus & Francis 1990).

Parks for flow activities

Randolph Hester wrote his first book: *Planning Neighborhood Space* (1975) to practically address outdated park facilities. Hester (1975) believed people of the day were consciously seeking roots in their neighborhoods to re-create lost rituals or supplant them with new ones. An approach to socially suitable neighborhood design was endorsed that emphasized an understanding of local political views because the limited nature of neighborhood space leads to conflict over its use (Hester 1975). Of the social factors Hester (1975) addressed, the concept of *Symbolic Ownership* continues to resonate prominently for today's increasingly crowded urban areas. “Man will be spending even more of his life in space he does not own” (Sommer 1969, p. 43). Hester (1975) asserted that collective symbolic ownership of a neighborhood space increases alongside increased involvement in acquiring the space or manipulating it, as the users perceive the space meets their special needs and as the space

becomes a status object to outsiders, among other distinctions (Hester 1975, p. 36).

Hester (1995) notes that physical comfort is often the most important design element, yet draws attention to the importance of psychological comfort. While Csikszentmihalyi (1990) found that we experience 'flow' by **organizing our consciousness** apart from routine, Hester (1975) recognized the importance of consciously organizing our **physical environments** to maximize freedom of choice for optimal psychological comfort.

Notwithstanding, Hester (1975) highlights the importance of balancing order and diversity for different contexts. Outdoor neighborhood spaces are most successful when they are as adaptable as possible, yet still accommodate the highest priority settings/activities of the users (Hester 1975). The ability to relate to the natural environment is important because people tend to come away from those experiences feeling better about themselves. Hester (1975) suggests that kinship with nature goes hand-in-hand with a sense of personal identity apart from nature. When planning for safety, Hester (1975) argues, the concepts of *territoriality & dominance* as well as *interaction & activity variations* will help to find the right balance of supervised and programmed activities. Site characteristics standardized by designers are often perceived differently by users. It has been documented that the use of public space tends to lead to more use, especially when people feel safe (Whyte 1980). Figure 19 presents continuums of characteristics of fixed and adaptable spaces, which can be adjusted relative to each other to optimize use:

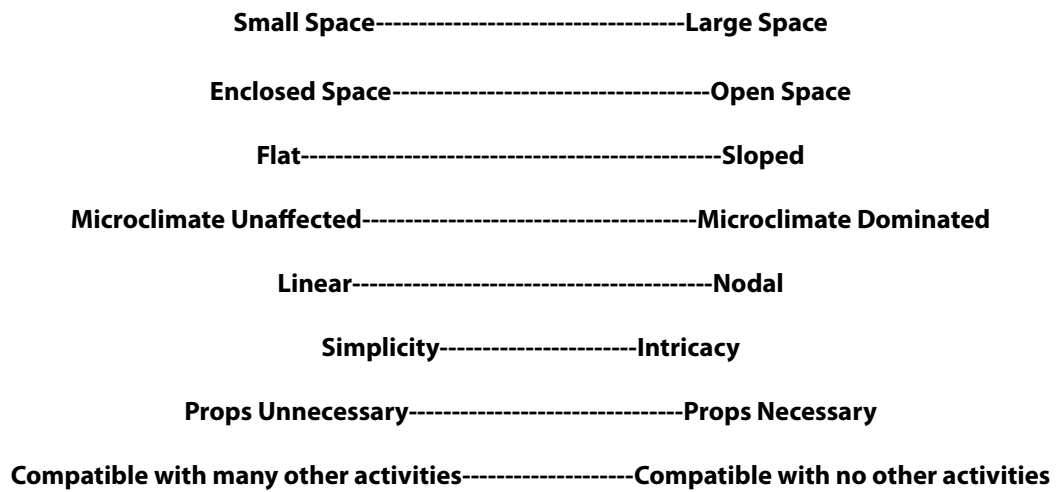


Figure 19. Continuums of characteristics of fixed and adaptable spaces

Hester (1975) proposes that aesthetic appeal can be modulated through a continuum of stimuli balance where repetition is boring but overly complex stimuli creates chaos:

repetition ~ similarity ~ novelty ~ surprise ~ complexity ~ incongruity ~ chaos

(adapted from Hester 1975, p. 67)

Finally – for the purpose of this research – the concept of *functional distance* is worth citing from Hester's study of neighborhood space (1975), which is described as follows: "In many cases, a person uses a facility that is farther away from his home rather than a similar facility because it is located on the pathway he frequently (travels). In such cases, the functional distance to that facility is shorter" (Hester 1975, p. 69).

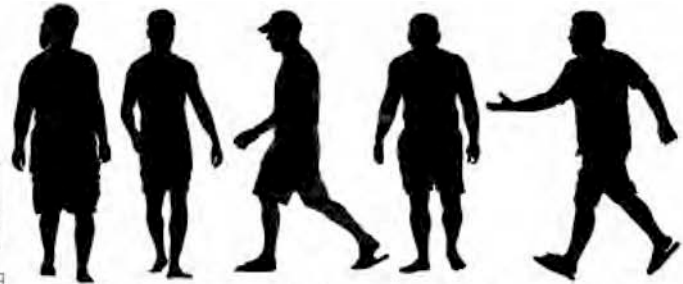
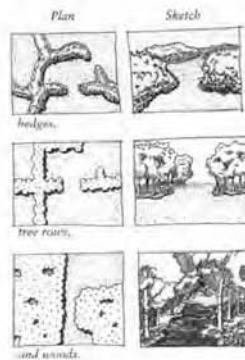
James J. Gibson (1986) was the pioneer of the concept of *ecological perception*. Until his scientific research, visual perception was studied by psychologists like a controlled snapshot or aperture – as if through a knothole in a fence. Gibson proposed that *natural vision* "depends on the eyes in the head on a body supported by the ground, the brain being only the central organ of a complete visual system" (Gibson 1986, p.1). In this light he provides

evidence that natural vision is panoramic and persists during long acts of locomotion: it is *ambulatory* (Gibson 1986). Instead of accepting that sensory inputs are converted into perceptions from the workings of the mind, Gibson supports injecting *systems theory* into the psychology of perception such that humans move through and manage themselves amidst their surroundings by “extracting invariants from the stimulus flux” (Gibson 1986, p. 2). Simply stated, the constants are our guide to perceiving a complex landscape. Kaplan, Kaplan and Ryan (1998) practically applied many of the concepts of environmental perception discussed by Gibson (1986). The brief overview of their guidelines which follow, pertains seamlessly to the linear, stop-and-go, ballistic nature of the game form we are investigating – golf. Our hunter-gatherer lifestyle origins may remain strong in our psyches as powerful survival instincts (Burenhult 2008, Wilson 1984) that translate to the activity of disc golf (Headrick 2002).

Gateways and partitions, trails and locomotion and views and vistas are discussed as the primary organizing elements of environmental perception (Kaplan, Kaplan and Ryan 1998), depicted in Figure 20. A gateway is described as an opening in a partition – vegetation, constructed fence or hilly topography – and provides a transition point to pause and consider options, visually constrained by limited access to what lies ahead (Kaplan, Kaplan & Ryan 1998). Along with partition elements, gateways orient people to areas, create identifiable regions and define smaller settings by focusing our attention on specific environmental information (Kaplan, Kaplan & Ryan 1998).

Gateways, by their own device, aid orientation by serving as landmarks offering a view into the “nest setting” – green/target/basket (Doak 1998, Houck 1998b) – and create anticipation as we move between a sense of 'outside' and 'inside' (Kaplan, Kaplan & Ryan

Gateways & Partitions

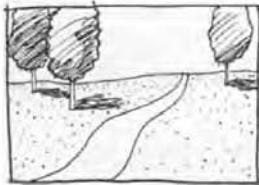


WITH PEOPLE IN MIND

Trails & Locomotion

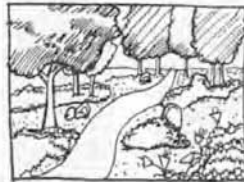


too open



Preference: low

a combination of open and wooded areas



high

too densely wooded



low

Views & Vistas



Sometimes a human-built element provides a focus by contrasting with a predominantly natural landscape.



A sense of the miniature can be created by views down from high points (left scene) and up to high points (right scene).



Figure 20. With people in mind

1998, p. 81). **Partitions** emphasize the landscape by creating 'legibility' and 'interest' with progressive, revelatory mystery, making it easier to make sense of a natural setting through *wayfinding* (Kaplan, Kaplan & Ryan 1998, p. 81). Interestingly, the idea that gateways tempt us to pause, think, choose and remember (Kaplan, Kaplan & Ryan 1998), can be directly related to the conceptions of Pieper (1952) and Huizinga (1938) of leisure and play. Play being the basis of culture – offers an opportunity to consider our station in life. Distinct gateways may obviate the necessity for physical signage (Kaplan, Kaplan & Ryan 1998, p. 85).

Permeable partitions can separate areas without blocking adjacent visual access, aiding our conception of the general layout of an area, and can take advantage of our natural tendency to pause on foot while moving through a landscape (Kaplan, Kaplan & Ryan 1998). Permeability of partitions in a landscape allows a sense of the general layout of an area that facilitates wayfinding similar to the way Csikszentmihalyi (1990) found that we experience flow when we are able to organize our consciousness through immediate stimuli that relates to a gestalt sense of self once the optimal flow experience – eternal now (Pieper 1952) – has reached denouement. In this way, partitions on a (disc) golf course might serve multiple roles of separation, wayfinding and safety.

Kaplan, Kaplan and Ryan (1998) assert that “Moving through natural areas is one of the most restorative activities” (p. 89). **Trails**, which can take the form of long corridors or short paths that bring people into close contact with nature by way of texture, allow both observation and exploration (Kaplan, Kaplan and Ryan 1998). Without trails it may be unclear whether or not it is safe or appropriate to proceed, but people prefer curvy paths that follow the lay of the land, are not arbitrary, and respond to path width as a function of intimacy

(Kaplan, Kaplan and Ryan 1998, p. 91). While very dense woods offer too little to view from a trail, open areas with few trees or other distinct features have also been found to be less preferred (Kaplan, Kaplan and Ryan 1998). The five guidelines below summarize the role of trails in outdoor landscape experience:

- (1) Access points with landmarks add interest
- (2) Maps at trailheads have limited value because they exceed visitor's memory
- (3) Different trail widths are confusing
- (4) Signs along trails can help orientation but detract from experience
- (5) Stopping points are opportunities for destinations, views, and slowing down

(adapted from Kaplan, Kaplan and Ryan 1998)

Many researchers of cognition and environmental experience recognize the positive implications that **views** have for health and well-being (West 1986, Ulrich 1984). Views are enjoyed passively from a physical standpoint but actively for cognitive involvement (Kaplan, Kaplan and Ryan 1998, p. 99). Bird's eye views of an area help to make a mental map of a broader environmental setting through *legibility* (Lynch 1960) and long views offer opportunity for mental exploration (Kaplan, Kaplan and Ryan 1998). The following guidelines help maximize design opportunities to utilize views from a cognitive perspective:

- (1) Offer enough to look at (*extent*): depth & richness of elements
- (2) Guiding-the-eye: inform where to look for coherence, focus & interest
- (3) Too many groupings (makes a view hard to look at)
- (4) Focus: contrast captures attention, creates starting point to examine a scene
- (5) Miniaturization of landscape: allows mental wandering of the unseen

(adapted from Kaplan, Kaplan and Ryan 1998)

More recently, Andereck & Knopf (2007) focused on the range of experiences visitors sought in **urban-proximate** recreation areas using a measuring technique called Recreation Experiences Preference (REP) Scales meant to guide recreation management for particular segments of visitors. Natural, educational, social and physical experiences were determined by perception of resource conditions and setting preferences (Andereck & Knopf 2007). It was found that those seeking **natural** experiences preferred remote, uncrowded, undeveloped settings while those seeking **educational** experiences had no clear preference but supported development of new facilities or programs especially if they were related to environmental interpretation or education (Andereck & Knopf 2007). **Social** experience seekers also had no strong setting preferences but were indifferent to facility and program development. Seekers of **physical** experiences also appeared to have no preference for facility or program development and preferred remote settings (Andereck & Knopf 2007).

Manning (1986) found that it is the preferences of those seeking recreation (not their demographics) that defines how a visitor views a recreational resource area; including their options about the way those resources should be managed. Majeske (1993) noted a difference between users of remote recreation areas and urban-proximate areas. The urban proximate users were actually less tolerant of activity impacts.

Wasted land & leisure

Alan Berger (2006) coined the word *drosscape* to refer to the various forms of wasted or underutilized landscapes that remain within the contemporary nexus of industrial disuse of aging infrastructure and horizontal development patterns or sprawl as epitomized in the Los Angeles region. *Drosscape* can comprise large or small tracts of land within, or on the

fringes of urban regions, and serve limited or one-dimensional use (Berger 2006). Berger (2006) believes it is important to consider these landscapes because they incongruously exist today, in the midst of finer grain post-World War II sprawl patterns. While smaller scale infill development on vacant lots has long been a popular strategy for increasing urban density and continuity, the plethora of larger underutilized, industrial and institutional sites contiguous with but separate/ignored by its adjacent urban fabric, offer tremendous opportunity for stitching this fabric together coherently (Berger 2006). Berger (2006) suggests that private firms involved with landscape/urban planning would do well to perform independent research on alternative development strategies for drosscape because of the notion that this kind of urban space is one of the last significant frontiers for future large scale projects that will address the pressures of our expanding urban populations.

A sample of prominent drosscape typologies in the Los Angeles region were identified early in the development of this thesis (1) freeway, (2) campus, (3) utility, and (4) recharge basin (Figure 21). Of the four typologies, Burris Pit Water Recharge Basin in Orange County, was further investigated in the form of a photo essay (appendix G). The relationship between a newly completed reach of a bicycle trail (2012), as a component of the Santiago Creek Vision Plan (2008), skirting the border of the fenced-off drosscape eyed by this author, suggests potential as a site for disc golf facilities and interpretation of natural processes. This author's own brief investigation of drosscape in the Los Angeles region serves as a surrogate biophysical baseline for this study in lieu of a referenced literature review, given the ostensible absence of data or research in this area at this time:

#_typology_loci_county	GOOGLE	A	B
1_freeway_110-elysian_LA <i>forgotten landscape</i> <i>anonymous</i> <i>accidental</i>			
2_campus_CalPolyPm_LA <i>ignored landscape</i> <i>inaccessible</i> <i>isolated</i>			
3_utility_r-cucamonga_SB <i>incidental landscape</i> <i>divisive</i> <i>linear</i>			
4_recharge-basin_V.P_OC <i>restricted landscape</i> <i>de-emphasized</i> <i>unappreciated</i>			

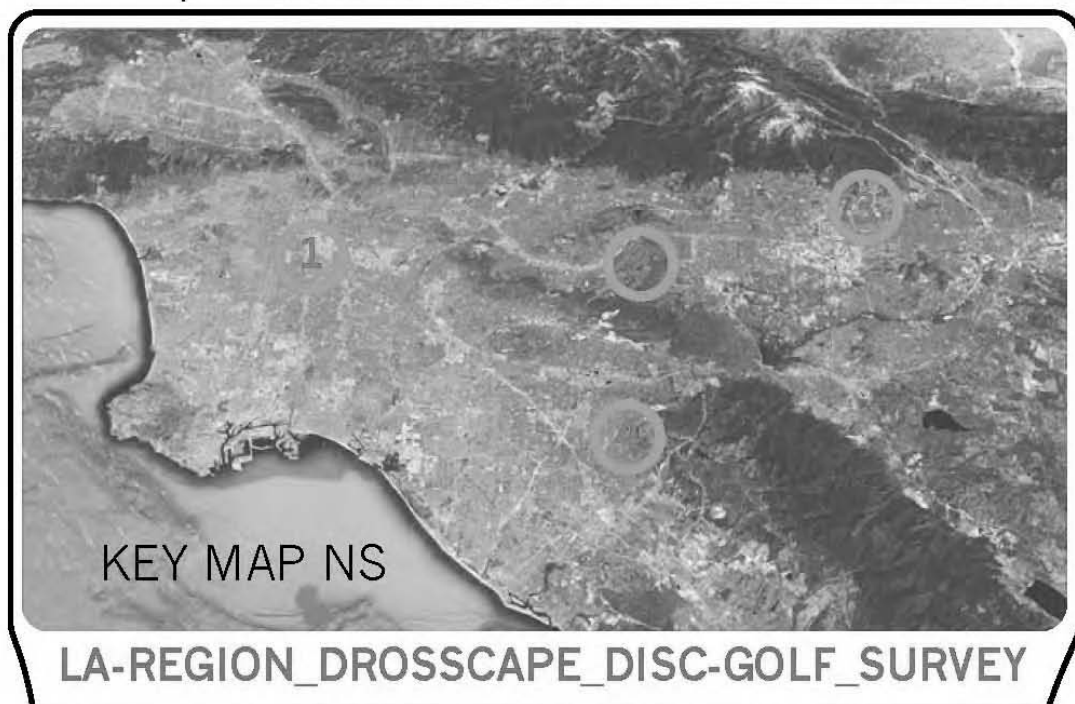


photo credits: 1A & 1B Elizabeth Gallardo / remainder by Michael Plansky

Figure 21. LA-region drosscape disc golf survey & location map

Whiston-Spirn (1984) believed that by respecting nature's limitations we could combat the monotonous sameness of urban form, echoing the ancient Greeks – where the philosophical concept of leisure originated (Simpson & Yoshioka 1992) – who were “masters at matching buildings, squares and streets of the city to its topography” (Whiston-Spirn 1984, p.12). Parks and urban-wilds today are singled-out as ideal sites for flood storage and water treatment as an example of the kind of process-based systems-approach that is needed (Whiston-Spirn 1984). More recently, others have shared Whiston-Spirn's (1984) sentiments about city form, such as Beatley (2010) who has imagined how cities can be more *biophilic*, and Marris (2011) who suggested cities should accept a new paradigm where 'neat and orderly' is destined to be replaced with what she called 'rambunctious gardens'. Whiston-Spirn (1984) supported the idea that incremental change through small projects are manageable because “solutions need not be comprehensive, but understanding the problems must be” (p.12).

The following excerpt speaks to the universality of urban-nature leftover typologies: “Cities throughout the world create similar habitats, streets, highways, squares and plazas, parks and sports fields, the grounds surrounding institutions like hospitals and universities, private yards and gardens, leftover land on swamps and steep slopes, and derelict land in vacant lots, garbage dumps, abandoned quarries and industrial sites” (Whiston-Spirn 1984, p.185). Bos Park in Amsterdam was cited as an example of an aesthetic alternative to the convention of pastoral parkland in its use of successional, temporary plant communities to colonize and heal disturbed habitats (Whiston-Spirn 1984). Emphasis was placed on the importance of designing the edge for natural area parks which are most appreciated at city outskirts and on larger tracks of land adjacent to inner city neighborhoods. In order to achieve this

effectively, Whiston-Spirn (1984) suggests we “devise a simple maintenance program, and.... solicit the participation of people who live and work nearby” (p.198).

In regards to animal diversity in cities, habitat size was cited as being the most common limiting factor. Borrowing from the then emergent field of landscape ecology, the size, shape and continuity of habitat strips isolated in a matrix of buildings, pavement and lawn were targeted by Whiston-Spirn (1984) as promising subjects of small scale experiments.

Variations in topography were identified as opportunities to create many micro-environments (Whiston-Spirn 1984). Elevation changes on a site offer variation and interest to golfers (Doak 1998), leave potential to serve as partitions (Kaplan, Kaplan and Ryan 1992), and serve ecological functions (Whiston-Spirn 1984). This multi-functional approach to designing underutilized spaces in urban ecosystems results in resilience – the capacity to absorb change (Whiston-Spirn 1984). The capacity for disc golf courses to become resiliently inscribed into underutilized urban landscapes can be imagined much the way Whiston-Spirn believed in the potential for closed systems: “The more a park resembles a natural system, the more easily it can be managed as a relatively closed system. Parts of large parks, leftover land on steep slopes or along floodplains, and even weedy vacant lots, can all be designed as self-maintaining, self-regulating systems” (Whiston Spirn 1984, p. 249-250).

Lifestyle sports

The American Heritage New Dictionary of Cultural Literacy (2005) defines “culture” as “The sum of attitudes, customs, and beliefs that distinguishes one group of people from another” (Dictionary.com n.d.). The first half of this literature review cites authors whose universal theories about cultural formation as a product of leisure (Pieper 1952) and play (Huizinga

1938) in the public realm (Sennet 1977) have stood the test of time and have been expanded upon by subsequent scholars. The second half surveys the evolution of the industrial, commercial and socially-driven spatial patterns which set the public stage for acting out such cultural dynamics or lack thereof, as well as how we perceive human-altered natural settings. In the 1960's many adult recreational activities emerged, adapting both conventional park settings and underutilized spaces of the public realm as ritual playgrounds (Huizinga 1938) to develop and express new cultural forms as part of a larger postmodern (Rojek 1995) counter-culture movement (Anderson 1995, Midol and Broyer 1995).

As will be discussed, this surge of new leisure forms has been studied and categorized under various monikers over the past quarter century, but will heretofore be referred to as *lifestyle sports*; a way of life associated with an active outdoor recreational activity (Wheaton 2004). Disc golf has not been identified and studied by lifestyle sport scholars who have often been concerned with how lifestyle sport subcultures change as the activity becomes more dictated by mainstream commercialization. Like other lifestyle sports which have blended older forms (e.g.: skateboarding: roller-skating + surfing) disc golf blends the ancient game of golf by changing the ball to a much newer technology-driven object of leisure games: the flying disc, or *Frisbee*. Each form brings aspects of its own cultural values and beliefs, contributing to a unique lifestyle that plays out in spatial settings whose character is often determined by its participants.

Recent surges in the popularity of alternative recreation as a counterpoint to achievement sports (Rinehart 1999) are creating various subcultures with distinct sets of values. Beginning in the 1960's, the counterculture movement (Midol and Broyer 1995) not only questioned Western convention from a political perspective (Anderson 1995), but also the

spaces and times sporting activities would occur (Rinehart and Sydnor 2003). In this context, the scholarship of lifestyle sports has included but has not been limited to Beal (1995) and Borden (2001) who both studied skateboarding, Humphreys (1997) looked at snowboarding, Wheaton (2000) investigated windsurfing, Butts (2001) explored surfing, and Banvinton (2007) deciphered the phenomenon of *parkour* – urban free running. While these iterations of lifestyle sports among others that have been studied can each be characterized by their own unique cultural tendencies, they often share values that oppose rule-bound, competitive and masculinized dominant sport culture (Wheaton 2004).

Before going into what defines lifestyle sports as postmodern it is constructive to identify the nature of modern sports. Gatlung (1984) recognized how humans have conquered, dominated and modified their surroundings in the pursuit of leisure, which characterizes the tendency for modern team sports to disregard the landscapes from which they originated, resulting in standardized 'sportscares' (Bale 1994). Malcolmson (1973) indicates that this was not always true of team sports which were traditionally played in available spaces in any given town or village such as streets, squares, parks and fields, consequently having minimal impact on existing habitat. Sack (1986) discussed how the delineation of sports landscapes affords one group the ability to exercise power by excluding less important uses. In short we can make a generalization that modern sports emphasize achievement, order, strict rules, teams, importance of winning and delineated single use areas.

Wheaton (2004) asserts that lifestyle sports have recently come under increased scrutiny as a postmodern reaction to modern sports by scholars such as sociologists and psychologists, who have assigned several terms to describe these activities: *alternative sports*, *new sports*, *extreme sports*, and *wiz-sports*, among others. The following summarizes

broadly recognized characteristics of lifestyle sports across recent scholarship:

- Creation of **new activities** or **adaptation** of older 'residual' cultural forms (Donnelly 2003, Humphreys 1997, Wheaton 2004)
- Emphasis on **grassroots participation** (Rinehart 2000) – usually about participation not spectating, yet self-consciousness about being seen and presenting oneself to others, **revival of amateurism** (Midol and Broyer 1995)
- Consumption of **new objects**, often involving **new technologies**, embracing change and innovation (Donnelly 2003, Midol and Broyer 1995)
- Ideology promoting fun, hedonism, involvement, self-actualization, flow, living for the moment, adrenalin rushes and other **intrinsic rewards** – often denounce institutions, regulations, commercialization, and have an ambiguous relationship with traditional forms of competition (Csikzentmihalyi 1990, Rinehart 1998)
- '**Expressive sport**' rather than reward driven 'spectacle sports': emphasis on the **aesthetics**; blending with the environment and creative expression (Rinehart 1998)
- Predominately but not exclusively **individualistic** in form and/or attitude (Rinehart 2000)
- **Non-aggressive**; do not involve bodily contact (Bordieu 1984), yet embrace and even fetishize notions of risk and danger (Fiske 1989)
- New or appropriated outdoor '**liminal zones**' (Shields 1992), mostly without fixed or created boundaries – Many lifestyle sports express a **nostalgia** for an imaginary past rural life and a sense of nature as something mysterious and **spiritual** (Hetherington 1988)

Depending on the intrinsic motivations of the individual, lifestyle sports can attract participants who desire to connect with nature, achieve an adrenalin rush or simply for the social rewards of being part of a special culture – an exclusive social identity apart from the mainstream (Wheaton 2004). Figure 22 graphically represents the relationships and values of each motivation related to the findings presented above.

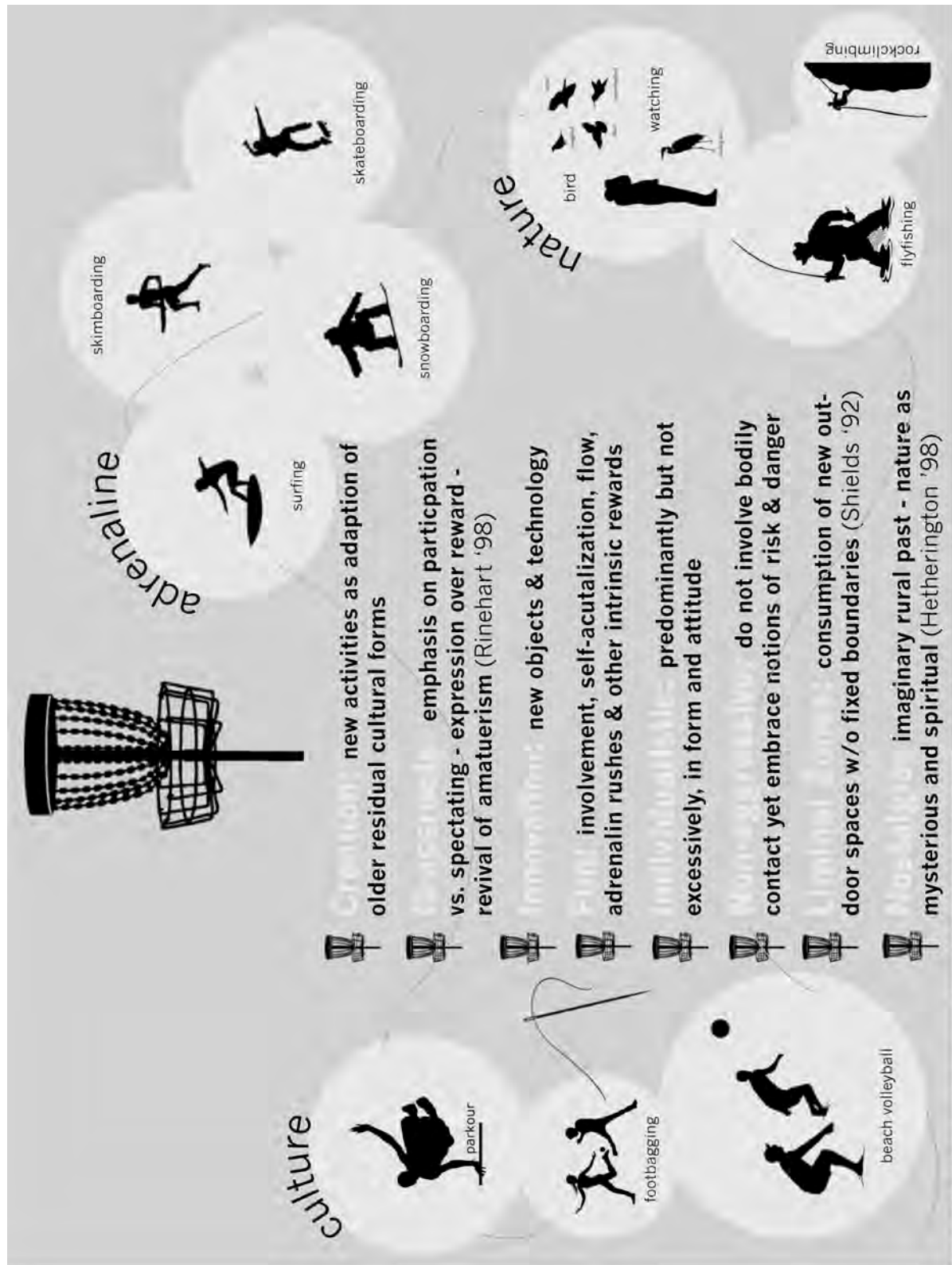


Figure 22. Lifestyle sports attractions & characteristics (adapted from Wheaton 2000, 2004)


Modern sports in North America grew out of the noble ideas of pioneers in leisure and recreation outlined above who promoted educational values and healthy activity for disadvantaged people, but Wheaton (2004) claims these notions are losing credibility today. Recognition of the underutilization of public parks (French 1970) and efforts to design strategies to re-activate these spaces such as those of Hester (1975) temporally coincided with the emergence of lifestyle sports in the 1960's and 1970's. The traditional notion that identity was relatively fixed based on identifiers – work, gender, ethnicity, religion, age – Kellner (1992) suggested, became fragmented with the acceleration of change and increasing cultural complexity that expanded sources of identification. Bauman (1992) believes that lifestyle has overshadowed class.

Wheaton (2004) describes how sporting activities came to offer our consumer culture a range of lifestyles to aspire to that signify self-expression and individuality, marking the leisure transition from late-modern to postmodern society. In a postmodern society where we are seemingly free to choose from leisure activities that fit our identity (Featherstone 1991), the extent to which a lifestyle sport becomes commodified can affect participant experience and the recruitment of new participants. In a consumer culture, sales of the products associated with a sport are the measure of its growth and decline in popularity. Tuttle (2013) documented the peak and gradual decline – since 2004 – of snowboarding in *Time Magazine* noting that as it became more mainstream “it necessarily lost some of the original edge and attitude”.

Aging participants with family obligations and costs of travel, equipment and lift tickets are cited as factors (Tuttle 2013). Table 3 lists dualisms from the literature reviewed herein about the nature of play, flow-activities and lifestyle sports, as a continuum, suggesting that

each activity has an optimal balance:

Table 3. Modern versus postmodern sport attrition table

Modern		Postmodern
<i>Top-down</i>		<i>Bottom-up</i>
Mainstream		Grassroots
<i>Touristic</i>		<i>Adventurous</i>
Predictable		Spontaneous
<i>Escape from routine</i>		<i>Critique or reflect on routine</i>
Pre-programmed		Self-reliance
<i>Conformity</i>		<i>Individuality</i>
Passive		Purposeful
<i>Egoism</i>		<i>Responsibility</i>
Elitism		Common good
<i>Team</i>		<i>Individual or dyad</i>
Competitive		Reflective or expressive
<i>Control</i>		<i>Risk</i>
Winning		Improving
<i>Extrinsic goals</i> (material, societal, status/acceptance)		<i>Intrinsic goals</i> (spiritual, peer recognition)

CHAPTER 3: METHODS

Introduction

For future disc golf course designers to be better informed about the manner in which site selection, layout and features work together, it has been determined that knowledge about subcultures of players is lacking. The background research, followed by the literature reviews above tap into industry data, expert interviews, media reporting, sociocultural theories, the role of the public realm, trends in leisure and urban pattern over time.

It has been said that leisure – time apart from routine – allows people to see where they have been, where they are in the moment and what paths they may take in the future (Pieper 1952, Rinehart and Sydnor 2003). It seems apropos that the values, beliefs and perceptions of the people who play disc golf as a leisure activity – the drivers of its growth -- are considered from the bottom-up. A deductive approach of this qualitative information can add meaning to top-down, inductive reasoning (figure 2). Answering why people play disc golf and their preferences is best accomplished by speaking with participants within the environments that engage them: disc golf courses. This section will (1) describe the site selection process for four distinct typologies of disc golf courses in Southern California from which to collect data, (2) explain why semi-structured interviews were chosen as the optimal method to gather qualitative data as the core of a multi-method approach incorporating also the ethnographic technique of participant observation plus a demographic survey of each interviewee, and, (3) detail the procedures for executing this approach.

Site selection process

It is the intent of this study to survey the values, beliefs and perceptions of disc golfers

– why they play and what their course preferences are – at a point in time within a particular region: Southern California. At the regional scale Southern California can be characterized by its amenable climate year-round (Dallman 1998) and its horizontal development pattern (Corbin 2001) more commonly referred to as urban sprawl (Berger 2006), historically facilitated by the region's prairie-land topography (Cunningham 2010) and expansive highway system that served speculative development (Jackson 1987). Hot, dry summers – often tempered by coastal influence (Dallman 1998) – and mild winters (Dallman 1998) favor year-round recreation.

A query on the website DG Course Review (2013) identified 85 permanent disc golf courses (27 private + 58 public within a 150 mile radius of Los Angeles) from Bakersfield – (south-central valley) – and Santa Maria (south-central coast) in the north, to San Diego in the south, all of which were installed between 1975 and 2012 (Figure 23). In this time 11 courses that used to exist in this radius have become extinct (DG CourseReview 2013). The majority of these 85 courses (58 within a 75-mile radius of 90001) are located in the predominantly urban Los Angeles region (Los Angeles County & Orange County) and its extension to the east referred to colloquially as the *Inland Empire*, comprising the urban portions of both San Bernardino and Riverside Counties.

In the interest of generating new knowledge that will bolster the Cal Poly Pomona Landscape Architecture Department's mission to “Regenerate Los Angeles” (Cal Poly Pomona 2012), interviews of disc golfers conducted for this thesis were focused on courses in urban settings that could be defined as four distinct typologies in order to serve the objectives outlined in the following paragraphs.

In the Los Angeles region, as described above, the abundance of courses in varying urban



Figure 23. Southern California disc golf courses

contexts offers an opportunity to study disc golf subculture behavior in urban settings that may inform future course designers in other regions. Los Angeles being one of the most park poor regions in the country (Trust for Public Land 2011) and cross-rich (Berger 2006), makes the region an ideal environment to test how disc golfer preferences may guide future design strategies. Underutilized or unconventional urban landscapes across the country may have the ability to serve rising urban demands for accessible outdoor recreation. In the Los Angeles region, these landscapes may be an ideal bell-weather for understanding how disc golf, as a unique lifestyle sport (Wheaton 2004), could play an important role in meeting those demands as the world's urban populations continue to grow (United Nations 2009).

As urban environments grow, the wild-urban fringe expands, leaving increasing physical and economic holes of deindustrialization in urban interiors (Bluestone and Harrison 1984, Snyder 2011). Irwin and Bockstael (2007) found that as urban sprawl has evolved, spatial heterogeneity and land fragmentation have increased. Disc golf courses can play a niche role in this evolution. Given these parameters, the courses isolated from urban settings such as in remote wilderness areas, state parks or rural contexts were excluded from the selection of courses to fit the four target typologies as described below.

In consideration of costs, time management, site visits, data analysis complexity and purposive sampling, the number of courses to visit was limited to four, each representing a distinct typology. Further studies may find it appropriate to look at additional and/or sub-typologies based on the four presented here. Using Professional Disc Golf Association (2011) demographic estimates and DG CourseReview (2013) numbers on California courses, it can be estimated that each disc golf course in California is patronized by 220 regular players. If 11 regular disc golfers are interviewed at the *average* course, that would represent 5% of its regular players, making the results generalizable to the larger population (Ritchie and Lewis 2003). Although – as it will be shown below – this researcher has targeted courses on the more popular end of the spectrum – above average numbers for regular players, for purposive sampling, 11 remained the target number of interviews at each course typology as a result of lack of information to determine individual course patronage at this time.

Figure 24 below shows how two primary variables were utilized along perpendicular axes to begin the process of profiling each typology of course at which to perform interviews. To make the typologies as distinct as possible, courses were chosen based on two parameters: the *age* of the course – older or newer – and the urban context – surrounded by

development or on the edge of development. A reliable rating system for courses, based on online crowd-sourced reviews from DG CourseReview (2013) which uses a rating system of 0 to 5 with 5 being the highest rating, helped set parameters for purposive sampling by eliminating courses that have ratings of 3 or less, and have at least five reviews reported.

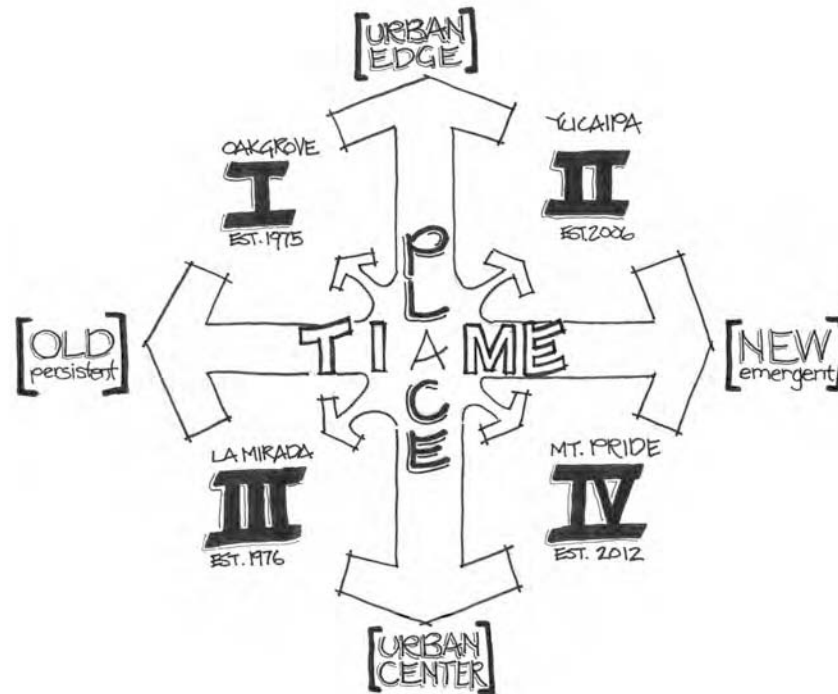


Figure 24. Course typology selection diagram

Two of the oldest courses with continuous patronage (Sandoval 2012) were clearly on opposite ends of the urban context spectrum and were subsequently chosen. Tables 4 to 7 survey all 85 courses in Southern California based on queries of dgcoursereview.com. This survey revealed a small number (3) of courses fitting typology I. To fit typology I (and typology II), a course would have to be located where the urban matrix gives way to unbroken open space or a rural context. Oak Grove, the first disc golf course, was chosen for typology I because of its high ratings and longest tradition. La Mirada was chosen as typology III for the same reasons, but also for its centralized urban-center location that attracts a diversity of disc golfers from all over the region (Simons 2012).

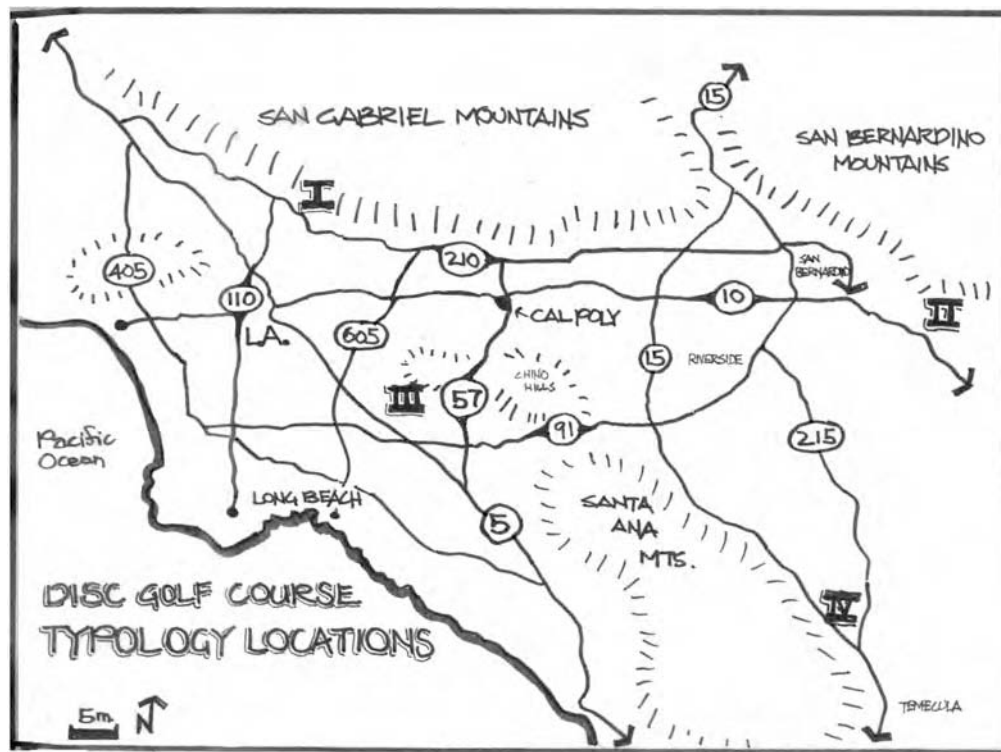


Figure 25. Course typology location map

Not surprisingly, the two newer courses chosen with high ratings are located in more recently developed areas of the Inland Empire where more urban-proximate open space is available. The course at Yucaipa Regional Park in San Bernardino County which was established as a seasonal course in 2006, but became permanent in 2010, is clearly at the urban edge, and is well patronized (Sandoval 2012), in line with its favorable rating (3.57). Being located more at the periphery of the Los Angeles region than Oak Grove, it is not as geographically accessible to denser population centers (Figure 26), which is a key characteristic of interest to investigate for newer urban fringe courses (typology II). Mountain Pride Park, established in 2011 and reconfigured in 2012, in the City of Murrieta (Riverside County) is located in the middle of predominantly single family residential development between the interstate 15 and 215 intersection, just north of Temecula, California. Figure 25 shown above maps the locations of each typology.

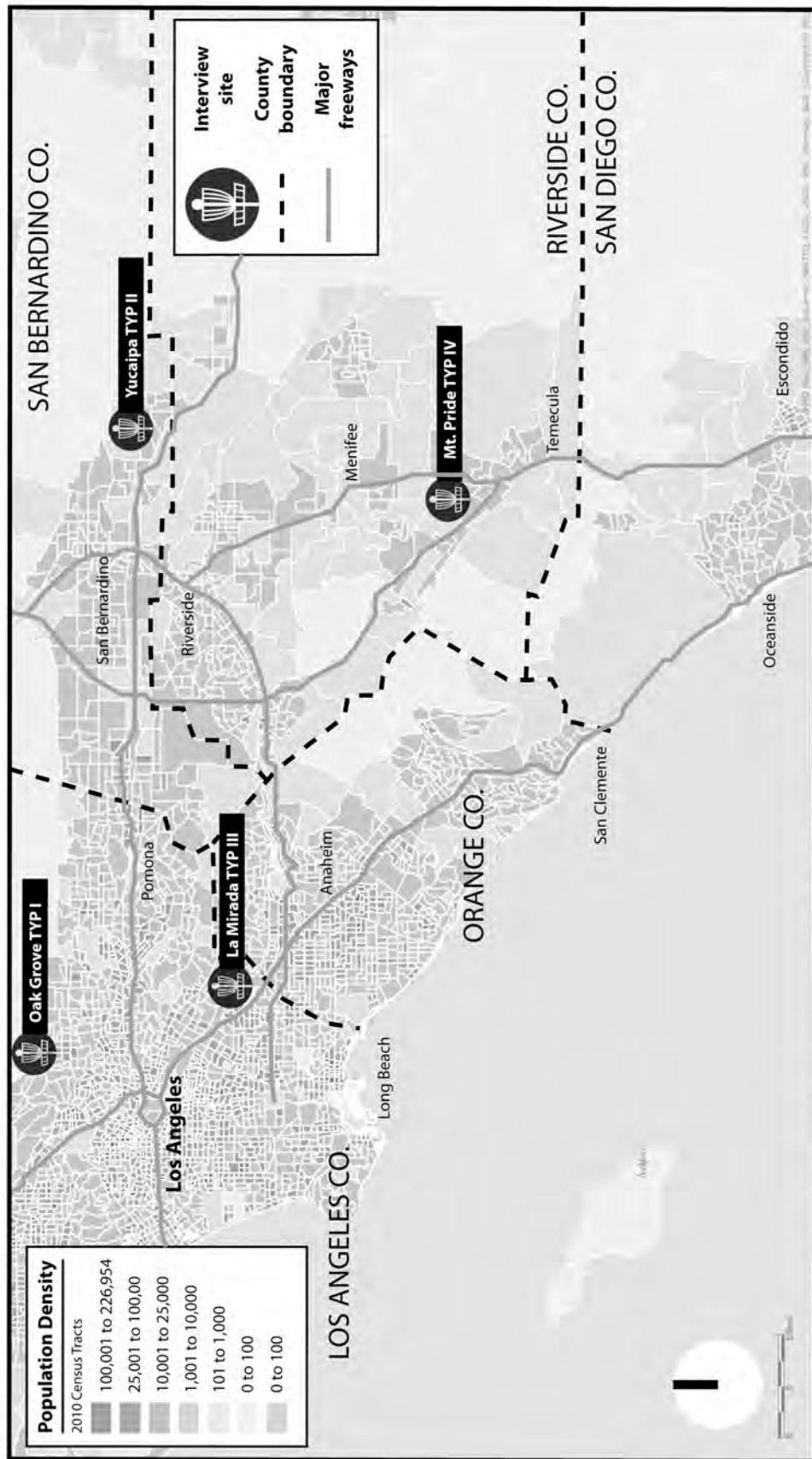


Figure 26. Population density/typology location comparison (adapted from ESRI 2013)

A survey of Southern California courses (tables 4 to 7) revealed an abundance in residential settings, including parks designed to exclusively serve newly developed neighborhoods. The Mountain Pride course (typology IV) fits the urban center criteria well and is more geographically accessible to a larger population than Yucaipa (typology II), especially to disc golfers who may travel from San Diego County. Along with its high rating (3.94), it was chosen as a good site to discover varying relationships between distribution and attraction to newer urban center courses.

Tables 4 to 7 detail and then summarize existing Southern California disc golf courses. Courses are listed from 1 to 85 based on distance from central Los Angeles – 1 being nearest (3 miles), and 85 being furthest (140 miles). Year established is listed in the column labeled “Est.”. County abbreviations are as follows: San Bernardino (SBO), Santa Barbara (SBA), Riverside (RS), Los Angeles (LA), Orange County (OC) and San Diego (SD). The data summary with table 7 breaks down the occurrence of courses based on typology, public/private, older/newer, and land use category. Overall, the data from the tables reveal a recent surge in new courses being established in the past decade; increasingly being sited in locales on the fringes of, or beyond conventional park settings, by appropriating underutilized landscapes. Rural and remote courses were surveyed, making up a significant percentage (40%) of Southern California courses, but were excluded from this study (do not fit the defined typologies) because they represent exclusive destination courses, or courses in isolation, unrelated to the focus of this thesis: disc golfer preferences in urban settings. Following the tables are a series of both context and site maps for each course being studied (figures 26 to 33), representative of each of the four typologies (highlighted in bold in tables 4 and 5).

Table 4. Southern California disc golf course survey 1-24 (adapted from dgcoursereview.com 2013)

	Course name/Location/#holes	Est.	Rating 0 to 5	TYP I	TYP II	TYP III	TYP IV	Rural/ Remote	Zip	County	Pub/ Prvt	Land use
1	Chavez Ridge/ Los Angeles/18	2006	3.42			X			90012	LA	Pub	local park fringe
2	Mills Park/Carson, CA/9	1999	1.43			X			90746	LA	Pub	local park integrated
3	Private Anderson Park/Carson, CA/9	1988	2			X			90745	LA	Pub	local park integrated
4	Polliwog Park/Manhattan Bch, CA/9	2005	2.11				X		90266	LA	Pub	local park integrated
5	Whittier Narrows Park/S. El Monte, CA/27	1981	3.05			X			91733	LA	Pub	local park integrated
6	Liberty Park/Cerritos, CA/9	unknown	2.33			X	X		90703	LA	Pub	local park integrated
7	Oak Grove/Pasadena, CA/20	1975	3.43	X					91103	LA	Pub	reg. park, integrated/fringe
8	La Mirada Park/La Mirada, CA/front 18	1976	3.96			X			90638	LA	Pub	reg. park, integrated
9	La Mirada Park/La Mirada, CA/back 18	'80s	3.73			X			90638	LA	Pub	reg. park, integrated
10	El Dorado Park/Long Beach, CA/18	1981	3.53			X			90815	LA	Pub	reg. park, integrated
11	Debell Disc Golf Course/ Burbank, CA/9	2012	2.88		X				91501	LA	Prvt	ball golf course, integrated
12	Twila-Reid Park/Anaheim, CA/9	unknown	2.26			X	X		92803	OC	Pub	local park integrated
13	Huntington Bch Central Park/H.B., CA/18	1977	3.27			X			92649	OC	Pub	reg. park integrated/fringe
14	Northside Park/Azusa, CA/9	unknown	2.67	X	X				91702	LA	Pub	local park integrated
5	Sylmar (Veterans Park)/Sylmar, CA/18	1980	4.06	X					91342	LA	Pub	local park, integrated/fringe
16	Frontier Park/Tustin, CA/9	unknown	1.43			X	X		92780	OC	Pub	local park, integrated
17	Prado Disc Golf Course/Chino, CA/18	2009	3.52		X				91708	SBO	Pub	reg. Park, integrated
18	Aldrich Park/University of Cal. Irvine/18	1977	NR			X			92697	OC	Pub	university campus, integrated
19	Deerfield Community Park/Irvine, CA/9	1980	2.46			X			92604	OC	Pub	local park, integrated
20	River Walk Disc Golf Course/Corona, CA/7	2008	2.38		X				92880	RS	Pub	residential park, integrated
21	Central Park/Saugus, CA/18	2005	2.08	X					91350	LA	Pub	reg. park, integrated/fringe
22	Green Valley CA/9	2009	2.1					X	91390	LA	Pub	community hall, fringe
23	Conejo Vly YMCA/Thousand Oaks, CA/9	2004	0.5	X					91360	Ventura	Prvt	YMCA, fringe
24	Rabbit Flats/Thousand Oaks, CA/18	2010	3.06				X		91360	Ventura	Pub	local park, fringe

Table 5. Southern California disc golf course survey 25-48 (adapted from dgcourserreview.com 2013)

	Course name/Location/#holes	Est.	Rating 0 to 5	TYP I	TYP II	TYP III	TYP IV	Rural/ Remote	Zip	County	Pub/ Prvt	Land use
25	Desert Sands Park/Palmdale, CA /9	2008	2.46					X	93550	LA	Pub	local park, integrated
26	Lake Piru Rec Area/Pirou, CA/9	2010	2.5					X	93040	LA	Pub	reg. park, integrated/fringe
27	Two Harbors/Catalina, CA/10	2010	NR					X	90704	LA	?	yacht club/historic site, fringe
28	Van Buren Golf Center/Riverside, CA/18	2008	2.75				X		92503	RS	prvt	ball golf course, integrated
29	Sky High/Wrightwood, CA/27	1999	4.52					X	92397	LA	prvt	ski resort, integrated
30	Buckhorn Ski Club/Angelos Crest Hwy/10	2010	NR					X	92397	LA	prvt	ski resort, integrated
31	Wrightwood Country Club/WW, CA/18	1999	3					X	92397	LA	prvt	mt. resort, integrated/fringe
32	Rancho Jurupa/Riverside, CA/9	2011	1.9		X				92509	RS	pub	reg. park, dg exclusive
33	Glen Helen/San Bernardino, CA/18	2011	3.5		X				92407	SB	pub	reg. Park, integrated
34	146 th Airlift Wing/Channel Islands Base/9	2007	2.5					X	93041	Ventura	prvt	military base, fringe
35	Thousand Pines/Crestline, CA/18	2010	1.8					X	92325	SBO	prvt	church camp, integrated
36	Ford Park/Redlands, CA/9	2007	2.12				X		92373	SBO	pub	local park, integrated
37	Hammer of Thor/Redlands, CA/9	2012	2.5				X		92374	SBO	pub	middle school, integrated
38	Mountain Pride Park/Murrieta, CA/18	2011	3.94				X		92562	RS	pub	res. park/urban wash
39	Alpine Camp/Blue Jay, CA/9	unknown	0.75					X	92317	SB	prvt	church camp, integrated
40	Coyote Point/Lake Casitas, CA/18	2005	4.49					X	93001	Ventura	pub	state park, integrated/fringe
41	Doris Davies Park/Victorville, CA/ 9	2007	2.58				X		92395	SBO	pub	local park, integrated
42	Forest Home @ Ojai Valley, CA/9	2004	NR					X	93022	Ventura	prvt	private recreation area
43	Rancho Acacias Park/Murietta, CA/9	2011	2.3				X		92563	RS	pub	local park, integrated/fringe
44	Yucaipa Regional Park/Yucaipa, CA/18	2006	3.57		X				92399	SBO	pub	reg. park, integrated/fringe
45	Creek Side/Forest Home, CA/9	2002	NR					X	92339	SBO	prvt	church camp, fringe
46	Mojave Greens/Edwards, CA/18	2010	3.3					X	93523	Kern	prvt	air force base, fringe
47	Camp Pendleton, CA/9	2010	0.5					X	92055	SD	prvt	marine base, fringe
48	Oak View Park/Beaumont, CA/18	2010	2.3					X	92223	RS	pub	local park, fringe

Table 6. Southern California disc golf course survey 49-72 (adapted from dgcoursereview.com 2013)

	Course name/Location/#holes	Est.	Rating 0 to 5	TYP I	TYP II	TYP III	TYP IV	Rural/ Remote	Zip	County	Pub/ Prvt	Land use
49	Center City @ Goat Hill/Oceanside, CA/18	2011	3.68				X		92054	SD	prvt	ball golf course, integrated
50	YMCA Camp Whittle/Fawnskin, CA/9	1997	NR					X	92333	SBO	prvt	YMCA camp, fringe
51	Brengle Terrace Park/Vista, CA/18	2012	3.71				X		92084	SD	pub	reg. park, integrated/fringe
52	Camp Cedar Lake/ Big Bear, CA/9	2009	3					X	92315	SBO	prvt	church camp, fringe
53	Pine Summit/ Big Bear, CA/9	2008	NR					X	92315	SB	prvt	church camp, integrated
54	YMCA Camp Oakes/Big Bear, CA/9	2004	2					X	92314	SBO	prvt	YMCA camp, integrated
55	Montiel Park/San Marcos, CA/9	2008	2.88				X		92069	SD	pub	utility easement, integrated
56	Valley Center Cmt'y Church/Vly Ctr./ 9	2012	2.25					X	92082	SD	prvt	community church, fringe
57	CSU San Marcos/San Marcos, CA/18	2010	2.63				X		92078	SD	pub	CSU campus, integrated
58	Sunset Park(for kids)/San Marcos, CA/6	2010	1.56				X		92078	SD	pub	local park, integrated
59	Kit Carson Park/Escondido, CA/18	2010	3.63		X				92025	SD	pub	reg. park, integrated/fringe
60	Astro Camp/Idylwild, CA/9	2000	2.5					X	92549	RS	prvt	children's camp, int./fringe
61	Isla Vista Peace Course/Isla Vista, CA/9	2000	1.19			X			93117	SBA	pub	local park, int/orchard/fringe
62	Evergreen Open Space/Goleta, CA/18	1995	3.03	X					93117	SBA	pub	local park, integrated/fringe
63	Lost Causa Country Club/Ramona, CA/18	2007	0.5					X	92065	SD	prvt	children's camp, integrated
64	Kern River Parkway/Bakersfield, CA/12	2006	4				X		93309	Kern	pub	bikeway, integrated/fringe
65	Silver Creek Park/Bakersfield, CA/9	1992	3.17			X			93309	Kern	pub	local park, integrated
66	City in the Hills Park/Bakersfield, CA/18	2012	2.75		X				93306	Kern	pub	residential park, integrated
67	Franklin Field/Taft, CA/18	1996	2.67					X	93268	Kern	pub	local park, integrated
68	"A" Street/Taft, CA/9	unknown	1.5					X	93268	Kern	pub	local park, integrated
69	Morley Field/San Diego, CA/19	1977	3.77			X			92104	SD	pub	reg. park, dedicated
70	Palm Desert Soccer Park, CA/9	2006	2.19				X		92260	RS	pub	local park, fringe
71	Sun Valley/La Mesa, CA/9	2005	3.06		X				91941	SD	prvt	ball golf course, int/fringe
72	San Lauren Park/Bakersfield, CA/9	2008	1.83		X				93312	Kern	pub	residential park,

Table 7. Southern California disc golf course survey 73-85 and summary (adapted from dgcoursereview.com 2013)

	Course name/Location/#holes	Est.	Rating 0 to 5	TYP I	TYP II	TYP III	TYP IV	Rural/ Remote	Zip	County	Pub/ Prvt	Land use
73	Olive Glen/El Cajon, CA/9	2011	2.33					X	92019	SD	prvt	resort/olive grove, dedicated
74	YMCA Camp Marsten/Julian, CA/9	2002	NR					X	92036	SD	prvt	YMCA camp, fringe
75	Hart Park-Shark Tooth Mt/Bakersfield/18	2008	3.92					X	93308	Kern	pub	reg. park, integrated/fringe
76	Hart Park-Suicide Flats/Bakersfield/18	2008	3.44					X	93308	Kern	pub	reg. park, integrated
77	Riverview Park/Bakersfield, CA/9	1993	2.67			X			93308	Kern	pub	local park, integrated
78	Pac.Crest Trail/Kennedy Meadows, CA/9	2012	NR					X	93527	Kern	pub	campground, int/fringe
79	Pine Valley/Pine Valley, CA/9	2004	1.63					X	91962	SD	prvt	bible conf. ctr., fringe
80	Westside Park/Wasco, CA/9	2008	2.3						93280	Kern	pub	local park, integrated
81	Beattie Park/Lompoc, CA/18	2011	4					X	93436	SBA	pub	reg park, integrated
82	White Oaks Hotel Course/Lompoc, CA/9	1998	2.25					X	93436	SBA	prvt	hotel property, fringe
83	Preisker Park/Santa Maria, CA/18	2006	2.88		X				93455	SBA	pub	local park, integrated
84	Waller Park/Santa Maria, CA/27	1996	3.91			X			93455	SBA	pub	reg. park, int/dedicated
85	Vandenberg AFB/Vandenber AFB, CA/18	1998	3					X	94347	SBA	prvt	air force base, fringe

TYP I (old course, urban edge): 3 (1)

TYP II (new course, urban edge): 13 (1)

TYP III (old course, urban center): 15 (3)

TYP IV (new course, urban center): 16 (3)

DATA SUMMARY

Urban Typology Total: 47 (4) undetermined typology because of unknown age

Rural and/or remote: 34

Total courses surveyed: 85

public courses: 58

set at local parks: 26 regional/state parks: 18 residential parks: 4 military base: 4

private courses: 27

school campus: 3

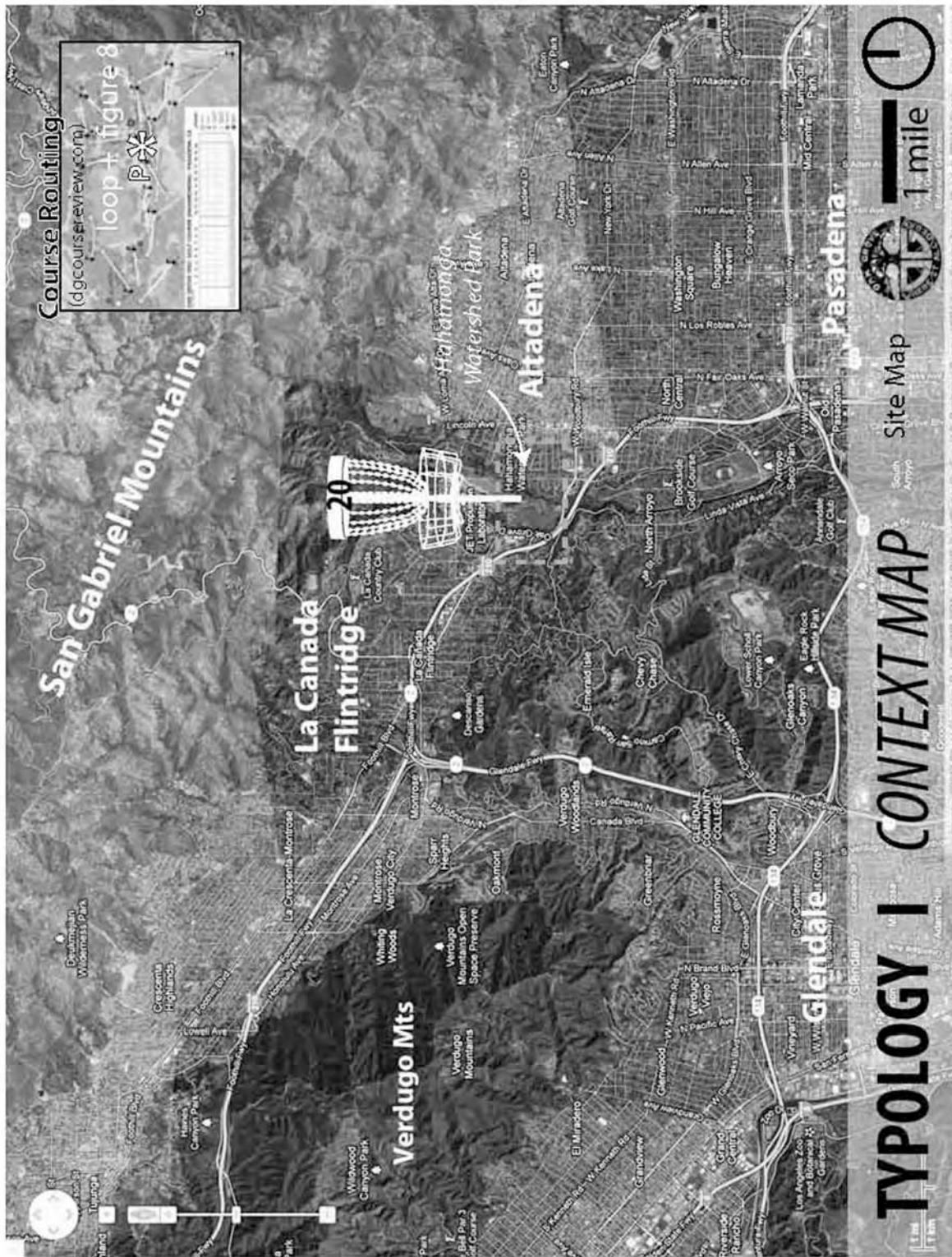
camp/retreat/resort: 24

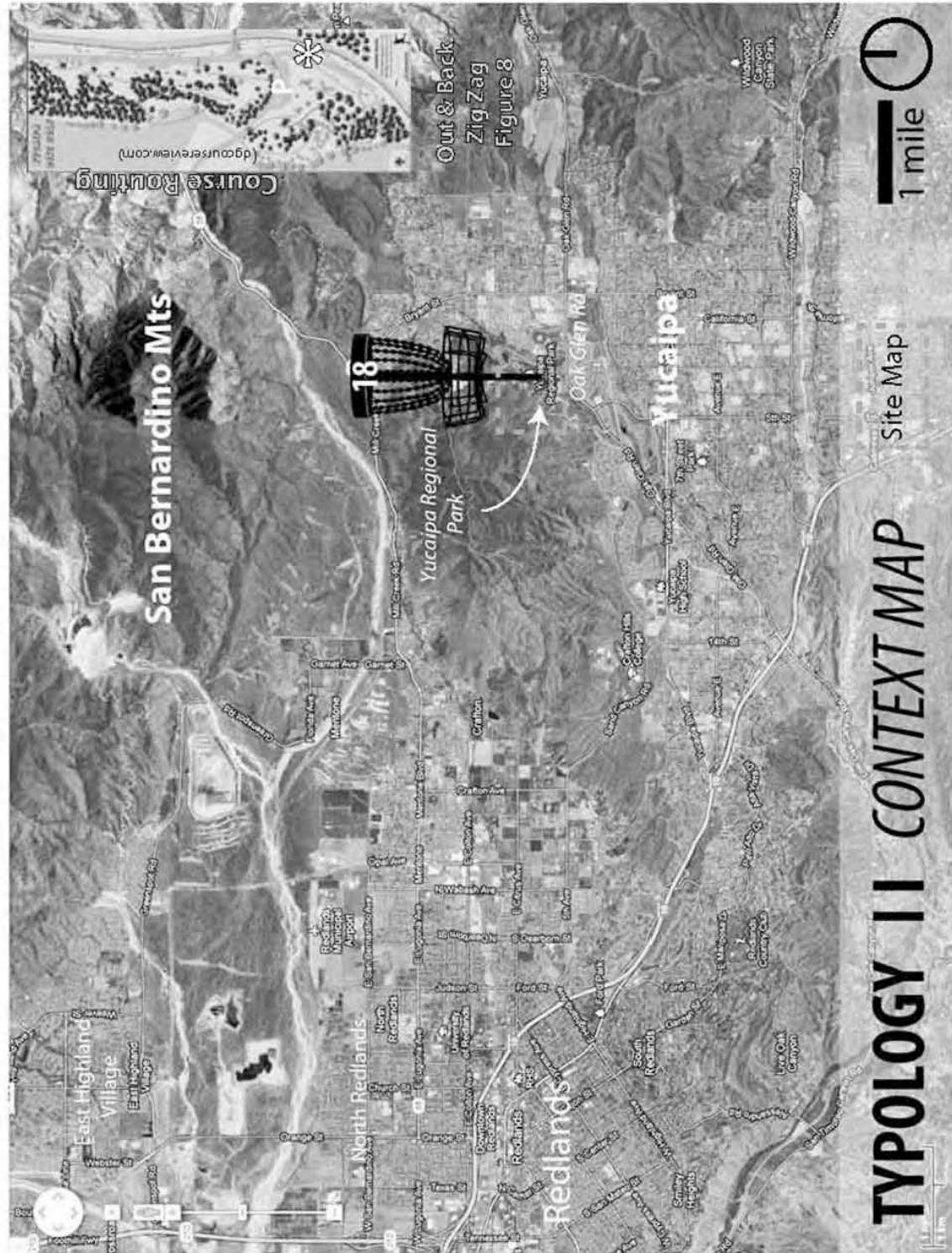
ball golf course: 4 other: bikeway, utility easement

Old Courses (est. 2002 or earlier): 22

New Courses (est. 2003 or later): 56

Unknown age: 7 (3 of which are rural/remote)





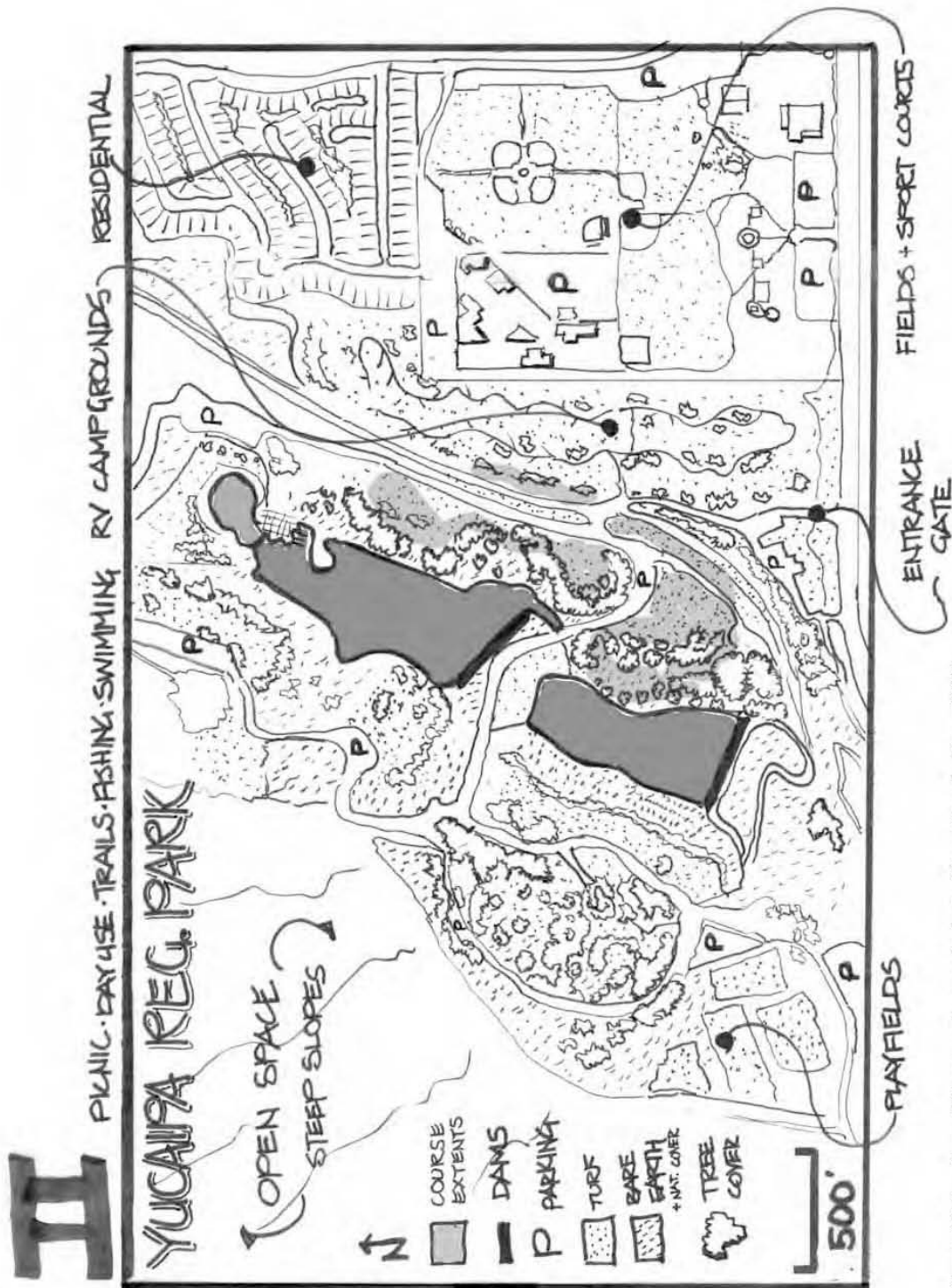


Figure 30. Typology II Yucaipa site map (adapted from Google Maps 2013)

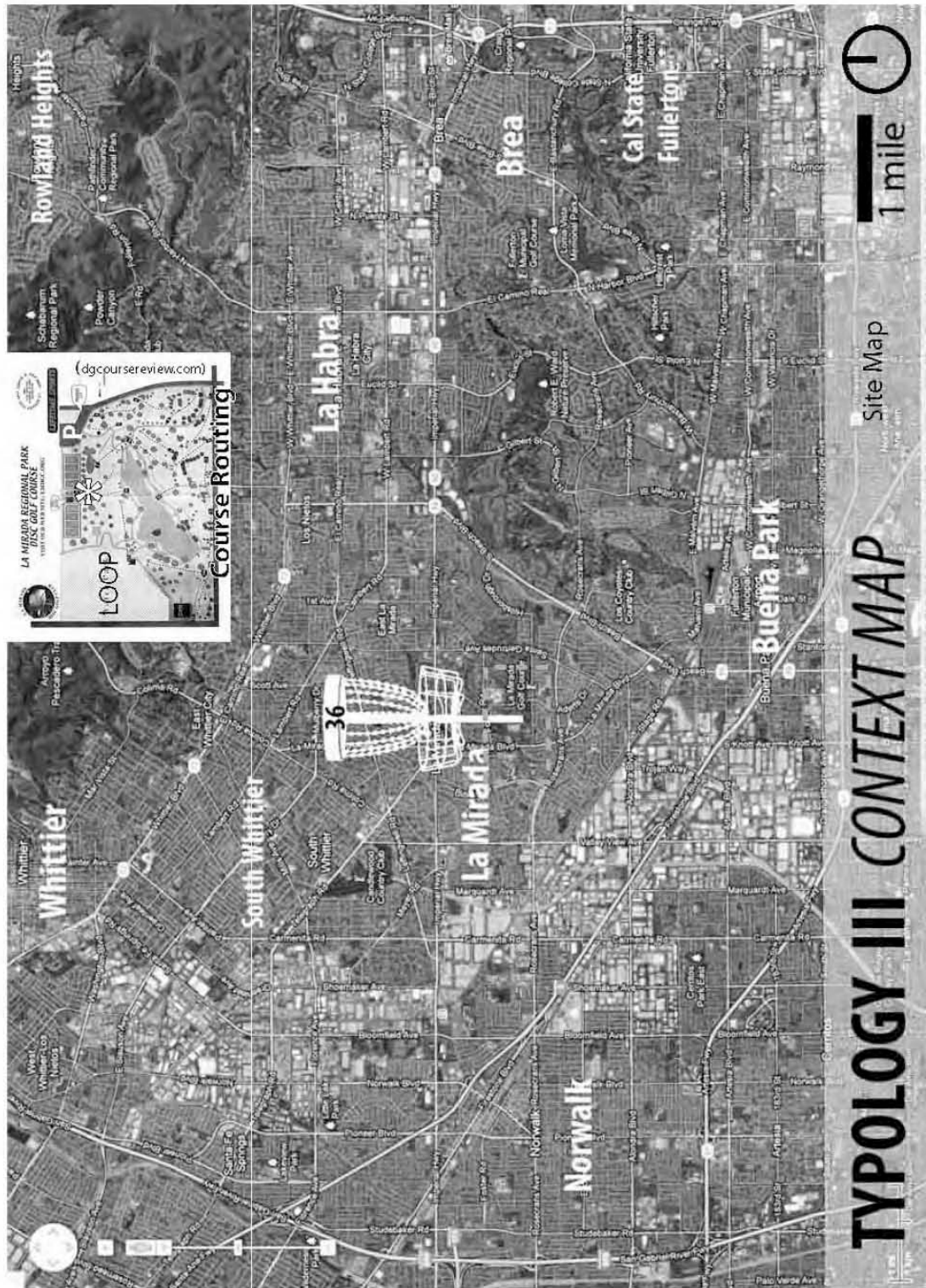


Figure 31. Typology_III context map La Mirada (adapted from Google Maps 2013, DG CourseReview 2013)

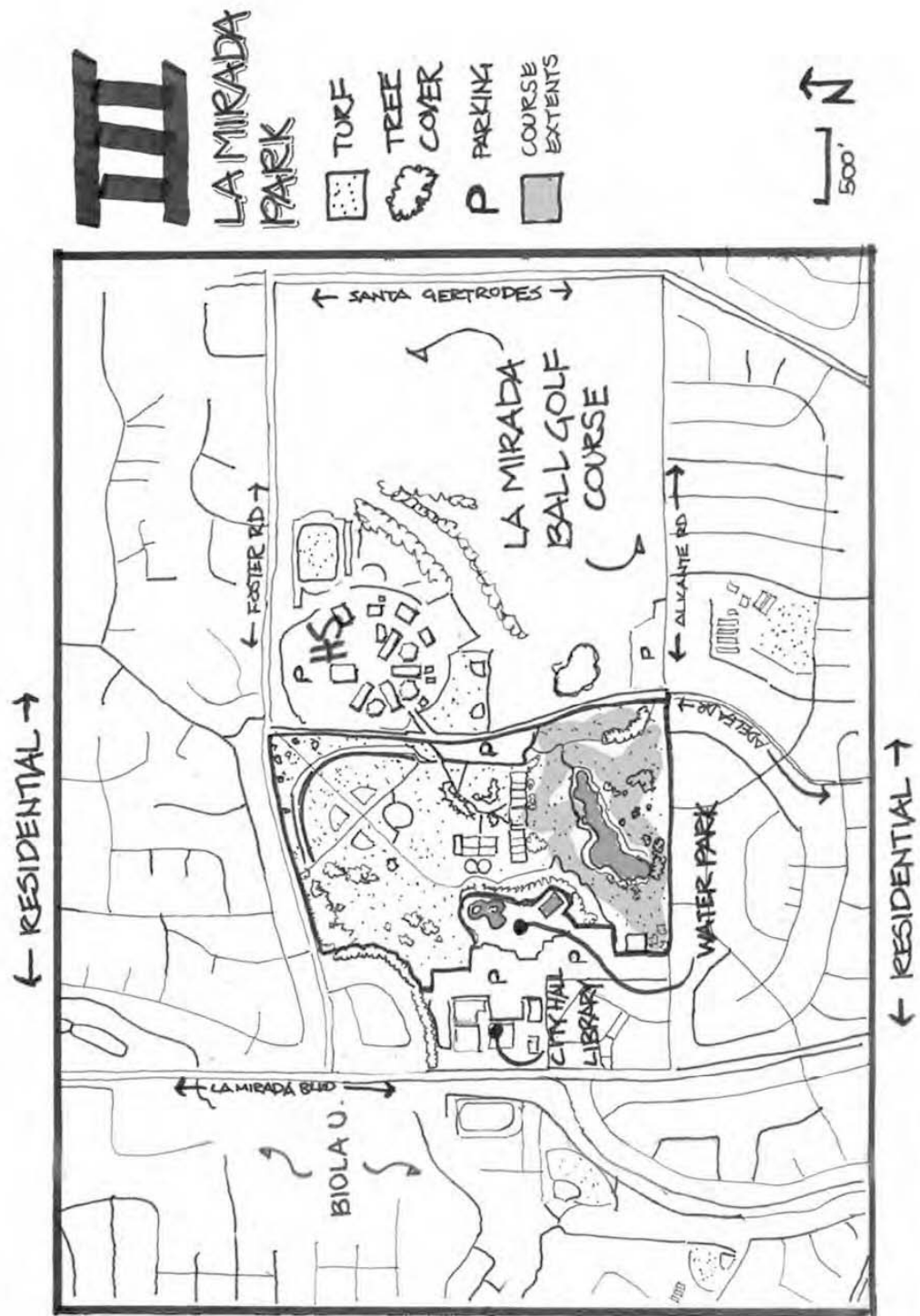


Figure 32. Typology_III La Mirada site map (adapted from Google Maps 2013)

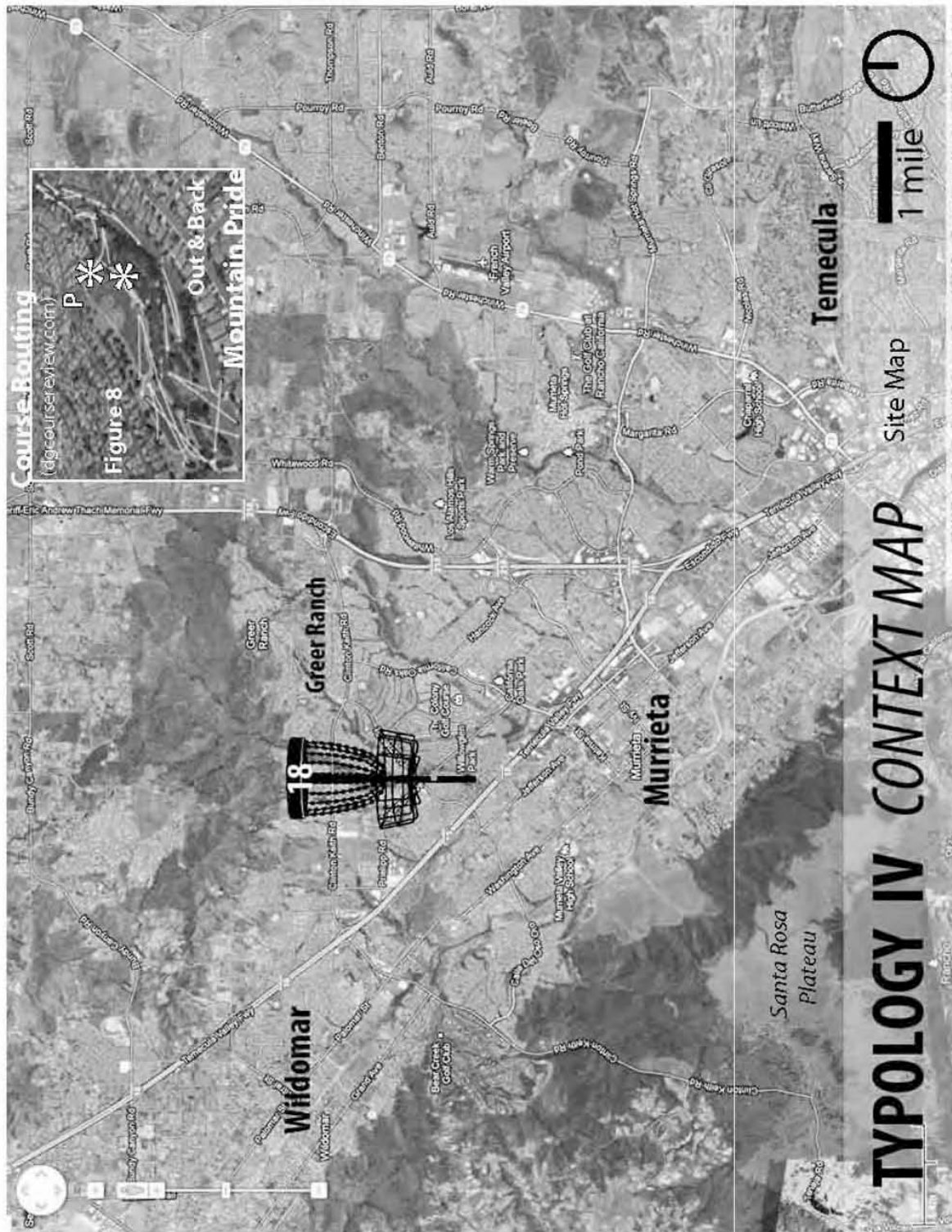


Figure 33. Typology IV context map Mt. Pride (adapted from Google Maps 2013, DG CourseReview 2013)

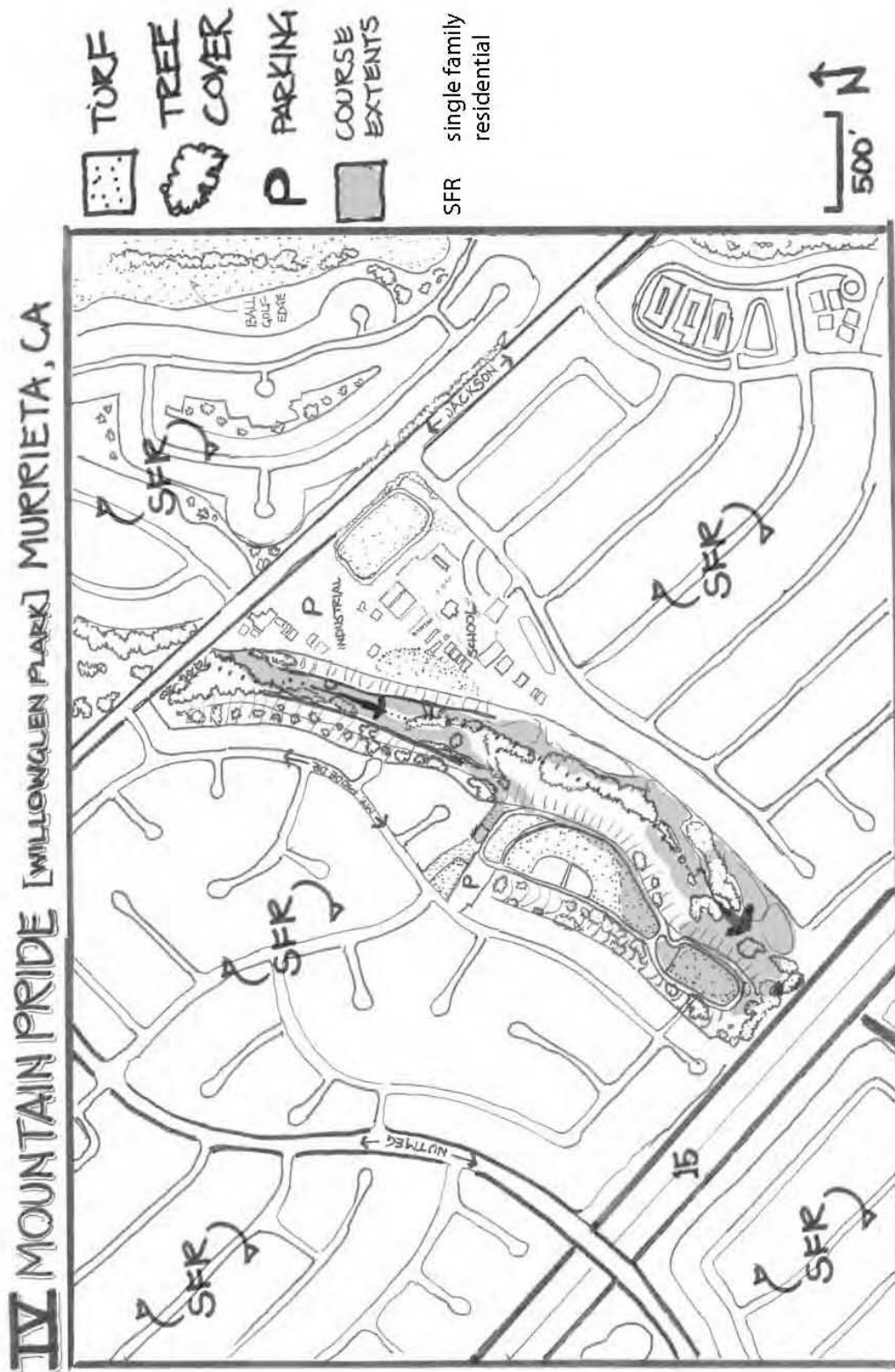


Figure 34. Typology_IV Mountain Pride site map (adapted from Google Maps 2013)

Optimized qualitative method

Overview

Legitimizing qualitative data to support design has become an important objective for the profession of landscape architecture (Gobster, Nassauer and Nadenicek 2010). Semi-structured interviews are the primary method of inquiry chosen to discover more about members of disc golf subcultures who patronize the four typologies selected for study outlined above, supported by the ethnographic technique of participant observation and correlated to a voluntary demographic survey. The following will describe each method.

Semi-structured Interviews

Semi-structured interviews can be adapted to answer known questions or discover new, unsolicited answers (Platt 2001). This study has appropriated this established method that is normally performed at arranged times with pre-determined subjects (Babbie 1998) and applied it to an impromptu field setting. The *Procedures* section below will describe how the four typologies of popular disc golf courses – targeted in part for purposive sampling – provided predictable settings to audio-record interviews. These field interviews not only had the advantage of capturing a discreet cross-section of disc golfers for each site, but also gained the advantage of a cognitive, place-based connection to the environment being studied (Kaplan, Kaplan & Ryan 1998) coming through in the responses to questions. Semi-structured interviews can be customized in innovative ways (Gray 2004) and blended with other research methods to improve validity (Lindlof & Taylor 2002).

In our complex modern society we perpetuate traditions in the hope that expected results will continue (Litter & Webber 1973) rationalized by a belief system (Babbie 1998). The scientific observations of Csikzentmihalyi (1990) in regards to ordering consciousness for

flow experiences noted earlier jibes with Babbie (1998) who understood the basis of social science research in a similar light: “people want their individual and social behaviors to (1) make sense, and (2) correspond with reality” (p. 458). Furthermore, “The belief systems and anecdotal evidence of cultural traditions correspond roughly to the roles of theory and data analysis in social research. Scientists want things to make sense and that's the role of theory” (Babbie 1998, p. 459). Disc golf subculture belief systems have only been carefully evaluated to a limited extent (Haley 2002, Trendafilova 2011). In addition the people interviewed may at times misunderstand their experiences or relate to them out of context in the following three ways:

- (1) Commitment to explanations (religious beliefs or political ideologies)
- (2) Reliance on anecdotes instead of data (vivid memories falsely support a belief)
- (3) No explicit link between observations and explanations

(adapted from Babbie 1998)

Keeping these human tendencies in mind, proper design, sampling and data collection for semi-structured interviews of disc golfers could productively steer initial expectations.

Whether these expectations are confirmed or contradicted, a jumble of observations could then be arranged into patterns that may reveal theories which warrant further study (Babbie 1998).

In the early 20th Century the distinction between surveys and interviews performed by social science researchers became more pronounced, whereas questionnaires were more impersonal, quantitative, reliable and accurate, interviews were often face-to-face, qualitative, philosophical and garnered more validity in the responses (Platt 2001). Table 8 illustrates a simplified evolution from structured to semi-structured interviews:

Table 8. *The Modern interview emerges*

Decade	Distinguishing Developments
1950's	<i>Conversations with a purpose</i>
1960's	<i>Reflexivity & autobiographical accounts</i>
1970's	<i>Semi-structured interviews become established practice</i>

Semi-structured interviews helped to answer specific social questions by distinguishing quantitative from qualitative data (Heaton 2004).

Several place-based studies which employed the technique were helpful for developing an interview guide and protocol for incorporating other methods. The United Nations commissioned Hoskins (1990) to elicit community participation in social forestry in Kenya. Semi-structured interviews were administered at a workshop for activists to discover thematic patterns. Sharp, Spooner, Miller and Briggs (2012) conducted semi-structured interviews for the Institute for Land, Water and Society in Australia to investigate tensions between stakeholders, townspeople and farmers, in regards to natural vegetation encroachment on agricultural lands. Photo-simulations to support the questions were offered to help prompt discussion (Sharp et al 2012). Examples of interview guides and processes for developing semi-structured interviews from Dick (2005), Hoskins (1990) and Kajornboom (2004) were valuable templates to help the development of an interview guide for this study, and can be seen in figure 28.

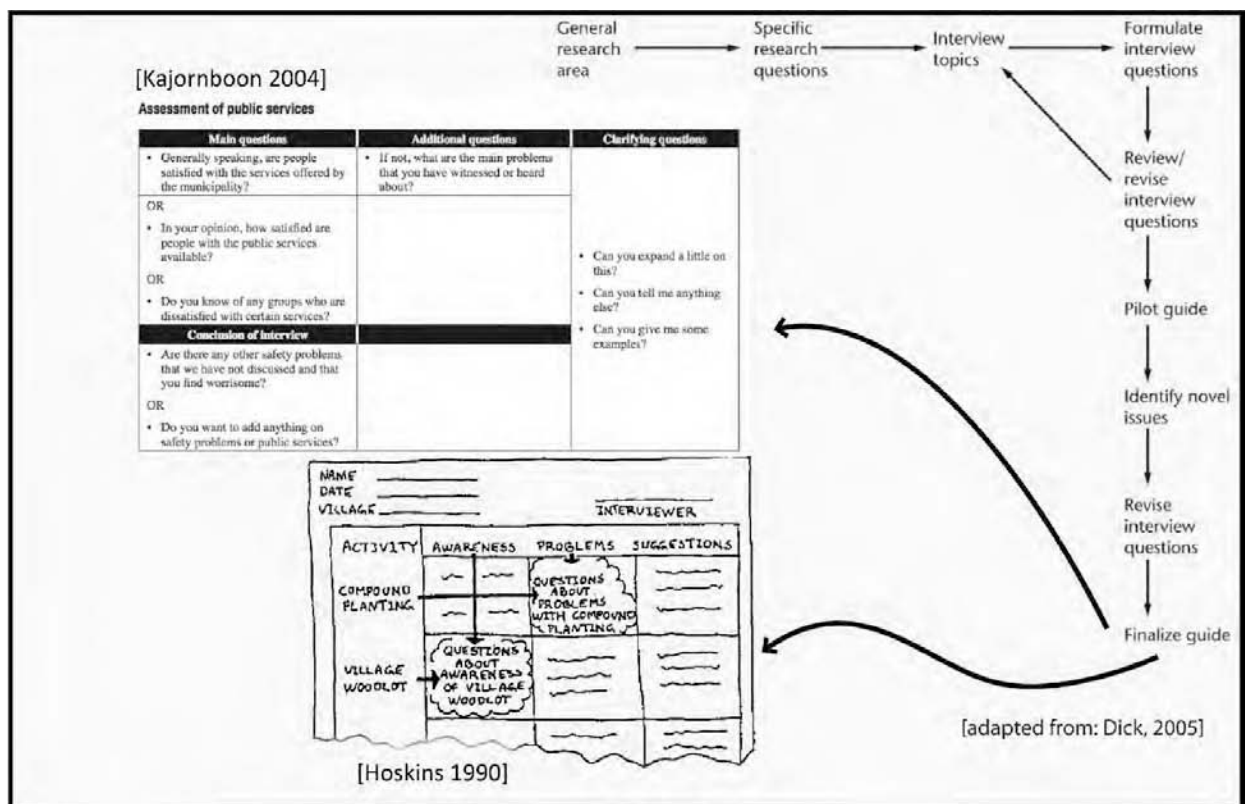


Figure 35. Developing semi-structured interview guides

Structured interviews are often used to collect quantitative data which can be analyzed statistically to produce generalizable results from a random sample, maximizing reliability and validity by sticking to a schedule of questions (Dicicco & Crabtree 2006). Unstructured interviews are generally performed as a lengthy, in-depth conversation only guided by general themes (David & Sutton 2004). The intent is usually to draw insight from narrative accounts of key informants (Laforest 2009). Semi-structured interviews are appropriate for this study because they offer a middle-ground that adheres to an organized approach to questioning that steers the interviewee while still allowing flexibility in the timing/framing of questions as responses dictate in order to cover targeted themes (David & Sutton 2004).

Preparation

Several elements were considered in preparation for developing and administering semi-structured interviews including setting, focus, ethics, language, rapport, objectivity, questioning and recording (Diciccio & Crabtree 2006). Conducting interviews in the field presents its own set of advantages and challenges (Laforest 2009). While interviews in the field can elicit more spontaneous responses, one cannot predict encounters, which creates sampling uncertainty (Gray 2004). Consequently, pre-interview site reconnaissance is required in order to better predict behavioral patterns (Gray 2004). This contributes to being adroit at reading your subjects, controlling composure and thinking critically simultaneously – skills required to effectively conduct interviews in the field (Diciccio & Crabtree 2006).

Identifying an appropriate setting for the interview has to do with physical comfort, psychological comfort and level of privacy, allowing respondents time and scope to talk about their opinions (Corbetta 2006). Semi-structured interviews are well suited to focus on what a researcher perceives as confusing or unknown about a behavior or set of beliefs of a group of people: “Just what about this thing is puzzling me?” (Lofland & Lofland 1995). Once a focus has been identified an interview guide or loose schedule can be prepared to ensure a certain level of consistency (Lofland & Lofland 1995). Integrated within or as a supplement to this guide should be a list of memory prompts for areas to be covered or issues to address so that a natural conversation can be simulated (Gray 2004) and affords the interviewer the freedom to ask probing questions that will expand on the subject at hand (Patton 2002).

Babbie (1998) admonishes that subjects need to be approached with an introduction that clearly states the who, what, why and how of the research. Patton (2002) asserts that a well delivered disclosure statement – composed to ensure it will be ethically performed – will

head off misunderstandings and allow respondents to make an informed judgement about whether or not they want to participate (Appendix A: Informed Consent). Once the guided conversation begins a command of the colloquial language of the target population helps to establish trust and elicit honest answers (Gray 2004).

Objectivity must be maintained throughout the interview so that generalizations about behavior are not made (Patton 2002) but the researcher must also be nimble enough to inject un-programmed questions without leading the respondent in order to cover targeted themes (Kvale 1996). With practice the combination of prepared and impromptu questioning sparked by the conversation can result in new discoveries or lines of inquiry (Gray 2004). Kvale (1996) suggests that note-taking during the interview is a valuable, acquired skill and an art, but that it should be viewed as a supplementary method of recording, or a device to make the respondent feel that what they are saying is important. Audio-recording – because one can review it later and repeatedly – can reveal not just what the respondent said but how they said it; Were they talkative? Cooperative? Nervous? (Patton 2002).

Kvale (1996) warns that not all questions are created equal; certain types of questions serve different purposes depending on the course and flow of an interview. Having different kinds of questions at your disposal and knowing when to use them can greatly improve the efficiency of the interview and quality of knowledge that arises in analysis (Kvale 1996).

Kvale (1996) believes nine types of questions can be used:

- (1) **Introducing** questions: begins a line of questioning or introduces a theme to elaborate on *[Tell me about how you started.....]*
- (2) **Follow-up** questions: encourages further elaboration on a potentially meaty subject *[could you tell me more? OR Yeeeee OR Reeeeeeally?]*

- (3) **Probing** questions: follow-up with direct questioning
[and that's why you stopped coming?]
- (4) **Specifying** questions: focuses respondent's direction *[and then what did you do?]*
- (5) **Direct** questions: get to the heart of the matter *[is it difficult to stay positive after a long day of.....?]*
- (6) **Indirect** questions: strategy avoids the problem of compound questions and may allow inquiry into about views by seeking qualification *[how do most of the people feel about.....? – followed by – do you feel that way too?]*
- (7) **Structuring** questions: brings the interview to a strategic place in order to cover your checklist of themes to be explored *[I'd like to shift topics now if that's OK?]*
- (8) **Silence**: pauses signal time for respondent to reflect and amplify their answer
- (9) **Interpreting** questions: clarify your understanding of the response *[is it fair to say you believe you're misunderstood when.....?]*

In addition Kvale (1996) offers qualities that a researcher can exude in temperament and presence: *clarity, gentleness and tolerance, sensitivity, openness, steering without being leading, remembering, interpreting*. Finally, avoiding compound questions like “do you like this park compared to.....?”, leading questions like “Don't you get nervous when.....?” or double-barreled questions like “Do you dislike being in the park most when its hot and crowded?” all help to make more of your data useful (Lindlof & Taylor 2002).

Procedures

Participants

Beginning February 5, 2013, the Cal Poly Pomona Institutional Review Board (IRB) for research on human subjects granted permission to conduct semi-structured interviews of

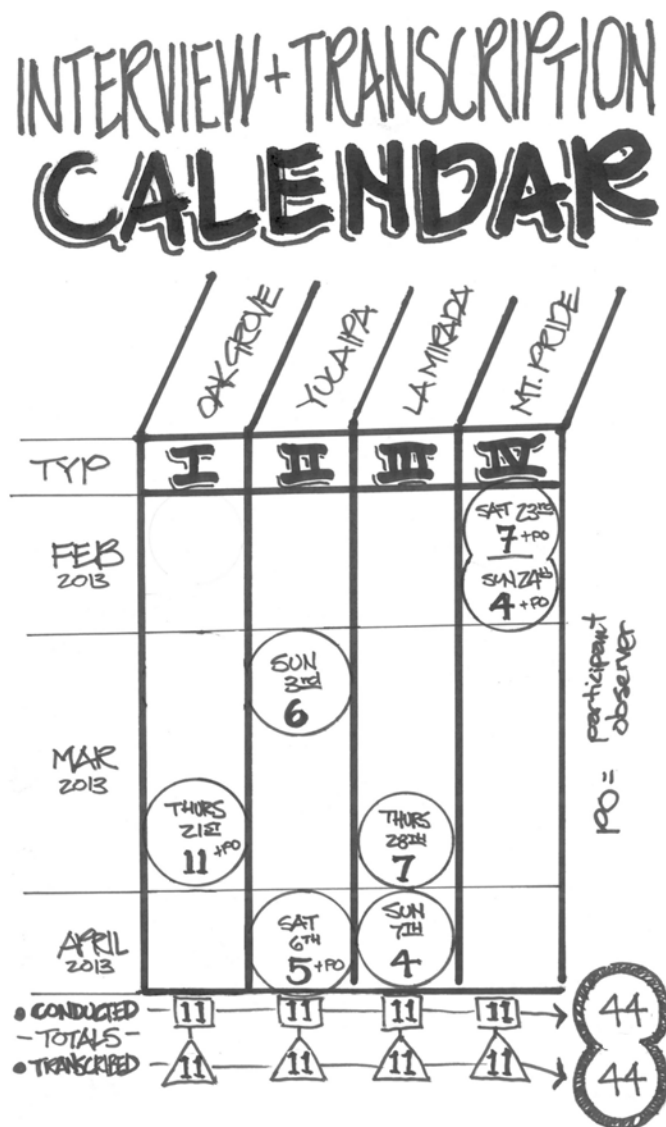
adult (18 years and older) disc golfers at Southern California courses as part of this Masters thesis upon informed consent (Appendix A). Minors were excluded for two reasons, (1) for ease of acquiring consent, and (2) to isolate how disc golf might engender behavioral characteristics of play in adult leisure outdoor activities (Gordon & Esbjorn-Hargens 2007, Huizinga 1938, Sutton-Smith 2001).

This researcher assumed the casual appearance and trappings – golf discs by his side – common to disc golfers (Sandoval 2012) and stationed himself in close proximity to tee box #1, at a bench or picnic table, in the shade when feasible. Potential interview participants were engaged when they appeared to be preparing to begin a round and did not seem rushed, whether as an individual or within a group. This researcher briefly explained his intent to conduct a 10 to 15 minute interview about disc golf and upon signals of interest continued to describe the study's purpose and conditions while offering the ICF (Appendix A) which explained the study in writing. Included in the verbal and written consent process was notification that after the digitally recorded interview some demographic information would be requested (Appendix C) on a voluntary basis.

When multiple members of the same group desired to do an interview it was offered that they could do so after their round, unless the group did not mind waiting longer to begin the round. For any younger looking subjects, an age of 18 or older was to be verified verbally before asking for an initialed copy of the ICF. Upon receipt, subjects were offered their own ICF copy to keep and interviews began while seated on a bench or picnic table with the digital recorder in between the subject and researcher. Recorded conversations followed the structure of the questions in the interview guide (Appendix B: Interview questions) and were aided by the strategies detailed above in the *Optimal Method* section.

Eight site visits to conduct interviews were scheduled between February 7th and March 17th, 2013 (seven were needed). Interviews were conducted between mid to late morning and early evening. Table 9 shows the sites and dates of the semi-structured interviews, and indicates days where the researcher also acted as participant observer (played a recreational round with one or more of those interviewed) and took notes afterwards to serve as supplemental qualitative data.

Table 9. Interview and transcription calendar



Interview question analysis

Semi-structured interviews were chosen as the optimal research method in this study – as described above – in order to ascertain a meaningful qualitative understanding of the disc golf subcultures associated with each of the four typologies investigated: the motivations and preferences for playing urban disc golf courses in Southern California. Each of the seven questions (Appendix B) were developed to elicit individual participant information on specific themes. Themes are identified so that a battery of content analysis can be applied systematically to the interview transcriptions (Appendix E), one question at a time.

Content analysis is a technique used to convert qualitative data into quantifiable categories in order to systematically describe written or spoken language (Sommer & Sommer 1997). Words, concepts or themes imbedded in text can be identified using this technique (Krippendorf 2012). Content analysis was first practiced in the 18th Century by scholars who sought a systematic process on which to base rhetorical religious arguments (Reis & Judd 2000). By the early 20th Century new socio-political issues brought about the need for quantitative evaluations of mass media content: the precursor to more universally accepted methods for quantifying qualitative data by mid-century, including sociological studies (Krippendorf 2012). Landscape architecture and other place-based environmental design disciplines have found increasing value in sociologically based research (Gobster, Nassauer & Nadenicek 2010, Miles and Huberman 1994).

Interview transcripts, discourses, protocols of observation, video tapes, documents and other forms of recorded information are now subjected to content analysis (Mayring 2000). Krippendorf (1969) had this definition: “content analysis (is) the use of a replicable and valid method for making specific inferences from text to other states or properties of its source”

(p. 103). Mayring (2000) has further defined content analysis as a controlled evaluation of texts within their context of communication which follows rules and step-by-step models without “rash quantification” (Art. 20, p. 2). Given this definition Mayring (2000) explains that there are four distinct advantages of quantifying content analysis:

- Fitting the material: distinguishing the text itself from the effect of the method
- Rules of analysis: step-by-step rules of procedure result in analytical units
- Categories in the center of analysis: carefully revised categories by way of feedback
- Reliability and validity: intersubjectively comprehensible, comparable results

Furthermore, Mayring (2000) suggests that in order to interpret the qualitative value of categories as closely as possible to the material, *inductive category development* can be employed (Mayring 2000). This involves the formulation of a criterion or a definition based on theoretical background and the research question. Tentative categories are worked through a feedback loop, revised and “eventually reduced to main categories and checked in respect to their reliability. If the research question suggests quantitative aspects (e.g. frequencies of coded categories) they can be analyzed (Mayring 2000, Art. 20, p.3).

In this study, in order meet the challenge of merging broad intellectual reasoning from the top-down, with specific cultural information from individual participants (Figure 2), transcribed interviews were also evaluated using *deductive category application* as described by Mayring (2000). This method can transform categories that remain poorly defined after going through the inductive process described above by using explicit definitions arrived at by applying a rule system, that is, coding rules (e.g.: strength of conviction, Likert Scale), and examples (e.g. quoted passages from transcriptions) (Mayring 2000). Qualitative content

analysis can be combined with other qualitative procedures (Mayring 2000). In this research investigating disc golfer motivations and preferences, in order to inform course design, it is combined with participant observation at three of the four typologies studied (I,II & IV). Together, a balance can be reached where subjective (individual's perception of) and intersubjective (generally agreed upon) definitions and categories can be analyzed more reliably.

The semi-structured interviews at four courses in Southern California were conducted in a manner such that the primary questions, prompts and responses would take on a conversational tone that put the subject at ease. At times respondents were allowed or encouraged to elaborate on matters not specifically targeted by the question last posed because (1) they were addressing a theme targeted by a subsequently planned question (2) the researcher did not want to unnaturally disrupt the interactive rapport or conversational character of the interview. Consequently, question-by- question content analysis of transcriptions was complicated at times, but in-text notes added during the transcription process helped to refer the researcher to the appropriate location of the content that needed analysis, and superfluous information, although transcribed, was ignored for the targeted purposes of analyses, the results of which are detailed in Chapter 4: Inventory and analysis.

Limitations

Because the format of semi-structured interviews makes it impossible to repeat the same interview with the exact same line of questioning for each subject, it is quite difficult to reliably compare different subjects and samples (Corbetta 2003). The strengths of semi-structured interviews are the high level of validity of the responses that can be achieved through flexible questioning which allows cross-checking and that samples are easy to obtain across a population in the field (Lindlof & Taylor 2002). The level of probing involved with semi-structured interviews makes generalizing opinions to larger groups appropriate but does little to reveal deeper personal emotions that are more likely discovered through a more unstructured forum (Lindlof & Taylor 2002). Table 5 below summarizes the measures of usefulness of semi-structured interviews according to Lindlof & Taylor (2002):

Table 10. Measures of usefulness of semi-structured interviews

Measure	Rating/Difficulty	Explanation
Reliability	LOW	Impossible to repeat exactly
Validity	HIGH	Depth of information through open-ended questions – body language can be observed beside verbal response
Representative	EASY	Can sample across a population or group
Generalizable	MEDIUM	Better for discovering opinions than deeper personal feelings

Low reliability can be addressed by relating responses to demographic data collected at the end of an interview (Lindlof & Taylor 2002). Along with notes taken down shortly after playing the role of a participant observer – as this researcher often found himself invited to join in rounds with respondents following interviews – a diversity of methods together can build a productive iterative analysis (Lofland & Lofland 1995).

Because our brains seem to be endlessly iterative (Berente & Lyytinen 2005), the qualitative nature of semi-structured interviews can fit naturally with human cognitive investigations and expand the web of relationships. The researcher can appear competent when conducting semi-structured interviews by preparing ahead of time, but the technique also allows respondents to express their views in their own terms (Kvale 1996). While this method can confirm what is already known, it is the reasons for the answers, not just the answers themselves, which can be important (Kajornboom 2004). A final benefit of semi-structured interviews is that they are repeatable, meaning respondents can be interviewed on multiple occasions over time (Kvale 1996).

Conducting semi-structured interviews runs the risk of construing too much and jeopardizing relevance if the researcher does not have the skills or tools to analyze the data (Lofland & Lofland 1995). Analysis techniques for this study are discussed below. The problems of respondents lying, imperfect recall or giving answers the interviewer wants to hear, are also constraints of this method (Kvale 1996). Although semi-structured interviewing can be time consuming and resource intensive, the procedures and analysis sections below show that the culture of the disc golfers targeted at the four courses studied was amenable to the informal, rapid fire interviews developed for this study.

Weather conditions can effect response rate and make it difficult to record the target number of interviews during the scheduled site visits. Rain or wet conditions after a rain event on the course where pooling and soft, saturated surfaces persist are the most likely weather deterrents for disc golfers. Although such rain events are more likely during the winter months in Southern California (Dallman 1998), when the interviews were scheduled, it was not difficult to adjust dates to avoid potential low response rates on such days.

Finally, a qualification must be made in regards to obtaining a representative sample of both recreational disc golfers and avid disc golfers, who play on a more regular basis. Although it was attempted to capture interview subjects through the middle of the day (work hours) and well past 5:00pm (after work hours) as well as splitting interviews at each site between a weekend-day and a weekday, a disproportionate number of avid players were captured. It is difficult to determine the level of recreational (occasional) disc golfers that exist for each course because (1) they play less, and (2) it appears that many new disc golfers become avid players soon after they are introduced to the activity.

On the other hand, actively targeting recreational players could constitute a strong sample selection bias. A significantly larger sample size than the one targeted for this study (44), along with focusing on one course, may be an appropriate strategy to capture a full spectrum of both recreational and avid disc golfers to understand their respective frequencies of play and landscape preferences. There may very well be as many or more recreational players who patronize a course than avid players, but it is difficult to tell because the avid players skew the sampling by visiting a course more often, and staying longer for multiple rounds. The same strategy could be used to better understand the playing habits and preferences of female disc golfers to help shed light on reasons for the large gender gap in the sport (PDGA 2011). At Oak Grove (typology I) all eleven targeted interviews were captured on a Thursday. This may be a flaw in this study because recreational players may be much more likely to play there on weekends.

It is important to attempt solving this sampling bias because understanding both recreational players and female players as integral to a unique, rapidly growing lifestyle sport, will be indispensable to future course designers.

CHAPTER 4: INVENTORY AND ANALYSIS

Overview

In order to turn qualitative data gleaned from interviewing members of the disc golf subcultures associated with each of the four typologies described in the “site selection process” section above, into useful information, inventories and analyses of several dimensions are described in this chapter. Although the dimensions described herein are far from exhaustive, they represent an amalgamation of modern environmental planning and design processes (Lyle 1997, McHarg 1969, Simonds & Starke 2006, Steinitz 2012) which consider biophysical and sociocultural information synergistically, at a hierarchy of scales.

First, **biophysical site evaluations** are presented for each typology graphically, reinforced by written descriptions. Second, **demographic results** collected from each respondent after being interviewed are broken down into table and graphic forms accompanied by brief discussions of prominent trends or patterns found in the data. Notes taken after participant observation experiences – casual rounds of disc golf following interviews, which provided clarifying and reinforcing information about site contexts and demographic results, are referenced where appropriate. Third, an analysis of the transcribed responses to the **interview questions** (Appendix E) presents a battery of iterative approaches that organize responses from each of the seven thematically derived questions in order to discern intersubjective patterns (Mayring 2000). Mayring (2000) contends that intersubjectivity, which describes broadly agreed upon meanings of qualitative information, can be achieved by arriving at definable categories through a feedback process. In this way, the goal of this study to merge deductive reasoning that interprets specific participant cultural perspectives from the bottom-up, with inductive reasoning from concrete data and recognized expertise,

can be realized. Finally, a **concluding discussion** analyzes how the results from all of the preceding dimensions may be viewed to form a picture of disc golfer landscape preferences as they relate to each typology and suggests conclusions that may be drawn about Southern California urban disc golf course design as a whole.

Biophysical site evaluations

Table 11 and table 12 together communicate the biophysical properties of each typology side-by-side as a reference designed to quickly distinguish relationships between profiles. Table 11 is the key for table 12. In this tabular scheme, each typology is evaluated horizontally according to (1) urban context (2) landscape ecology, and (3) operational characteristics of the site. Each category is divided into four sub-themes which are defined by letter-codes in table 11. The *urban context* was identified as relevant to this study because surrounding transportation options, land use types, site accessibility modes and flood control considerations can all influence how/why disc golfers cross the site perimeter. The *landscape ecology* category identifies characteristic plant material form, pattern, type and distribution in relation to onsite elevation changes. As a whole, this category defines the nature of landscape experience of the disc golfer within the site boundaries. The *operational* category identifies the dominant modes of travel within the site, existing strategies for orientation and physical safety considerations for moving along programmed paths of travel. In all four typologies these paths accommodate several programmed activity layers, serving a diversity of users. A vertical scan of each typology paints an individual profile while horizontal scans reveal inter-profile relationships. Following the tables, a written description of each profile correlates top-down with the graphic table.

Table 11. Code key for typology profile table

TYPOLOGY PROFILE TABLE KEYS	
URBAN CONTEXT	T TRANSPORTATION dominant modes surrounding site L LAND USE residential commercial industrial open space A ACCESS feasible, programmed arrival modes onto site FC FLOOD CONTROL concrete/earthworks/grass swale/water body/natural veg. percolation
LANDSCAPE ECOLOGY	M MOSAIC PATTERN corridor/island/mosaic/natural edge P PLANT COMMUNITY(S) E ELEVATION topography character; mostly flat/moderately hilly/hilly W WOODED tree cover; mostly open/scattered canopies/moderately wooded
OPERATIONAL	S SAFETY social safety perception, visibility/ physical safety, projectiles & use conflicts Way WAYFINDING orientation maps or kiosks/directional signage/trail markers/clear paths/nature signage PL PROGRAMMING LAYERS various C CIRCULATION onsite modes travel: walk/hike, bicycle, equestrian

Table 12. Disc golf course site typology profiles

		TYP I				TYP II				TYP III				TYP IV			
		MAPS pp90-97				Yucaipa Reg. Park New Urban Edge				La Mirada Park Old Urban Center				Mountain Pride New Urban Center			
URBAN CONTEXT	T																
	L																
LANDSCAPE ECOLOGY	A																
	FC																
OPERATIONAL	M																
	P																
	E																
	W																
	S																
	WY																
	PL																
	C																

Oak Grove site profile

Oak Grove disc golf course represents typology I (old/urban edge), the first permanent course, in what is now called Hahamonga Watershed Park at the northwest extents of Pasadena, California. The site is dominated by a mosaic landscape ecology that gives way variously to a natural edge condition to the east. Oak Woodland is the dominant plant community on most of the course, encircling a turf grass area. Alluvial Scrub and Black Willow Riparian plant communities (Perisho et al 2012) define the natural edge transition, providing open fairways and open long views of the San Gabriel mountains to the north and east on holes 5, 7, 8, 9, 13 and 14 (Figure 36). The course is laid out on land that is mostly flat and mostly closed-canopy-wooded with mostly to completely open tree cover on the holes mentioned.

The site is not directly accessible by public transit, but the Metro Local Line 267/264 takes riders to within a 15 minute walk from the park. Taking a bicycle to the park is quite feasible from the west, through La Canada Flintridge, as confirmed by disc golfers to the researcher through participant observation. Walking to the site is not nearly as reasonable except from the few residential areas and would involve difficult, high traffic crossings. Private automobile is the dominant option for arrival and the park is located within 1 mile of exit 21, Foothill Boulevard, off the 210 freeway. A considerable amount of free parking is available inside the park along Oak Grove Drive, but site visits and participant observation experience revealed that disc golfers use the 75 space parking lot (also free) downslope from the park entrance, along with bikers and hikers who park in the lot as a jumping-off-point to access trails. This lower lot is also utilized during softball practices and scheduled games. Although there are upper-middle class residential neighborhoods further to the west, the park is

directly flanked by institutional land uses to the west (equestrian center, United States Forest Service Station, public schools and churches) and the expansive, yet restricted campus of Jet Propulsion Laboratories to the north. The Arroyo Seco, its flood terraces and associated vegetation, border the park as green space to the west and south. Earthworks, percolation through natural vegetation cover and turf grass constitute the site's flood control strategies.

The issue of social safety perception in some of the visually secluded areas of oak woodland is ameliorated by a steady flow of disc golfers walking the course. Physical safety threats from discs as projectiles are minimized because the areas where the holes are sited are used almost universally by disc golfers as observed through site visits and participant observation dialogue with regular players. Additionally, the course is laid out in a figure -8 routing pattern that affords clear site-lines and largely avoids conflict with the parking area and trail access roads. Safety in the form of physical comfort is well served by numerous functioning drinking fountains throughout the course, as well as plenty of shade provided by tree cover but less so by the awkwardly sited portable toilets.

Physical wayfinding markers include new ecosystem interpretive signage in the parking lot, outdated but historic informational signage about the course rules and limited markings on the ground as well as outdated hole numbers on the concrete tee pads. To compensate for the confusion the local disc golf club provides paper course maps at hole number one and based on numerous researcher site visits, there always seems to be a local available to direct newcomers, which is needed because trails are not well marked or defined. In addition to disc golf, other programming layers include one community softball field which doubles as both a soccer practice field and an impromptu disc golf practice range at times when it is unoccupied. Picnic tables and barbecue areas are provided throughout the park, but

conversations during participant observation revealed they are only used by disc golfers, as a social extension of disc golf based camaraderie. Dog walkers pass through on their way to and from their cars and the trails they walk along the Arroyo Seco. Based on researcher site visits, additional circulation within the course area can include occasional hikers, equestrians and bikers using a trail that shares usage with disc golfers along holes 2, 3, 4 and 5 (Figure 36). There are numerous hitching-posts for horses throughout the course, but this researcher has not observed them being utilized.

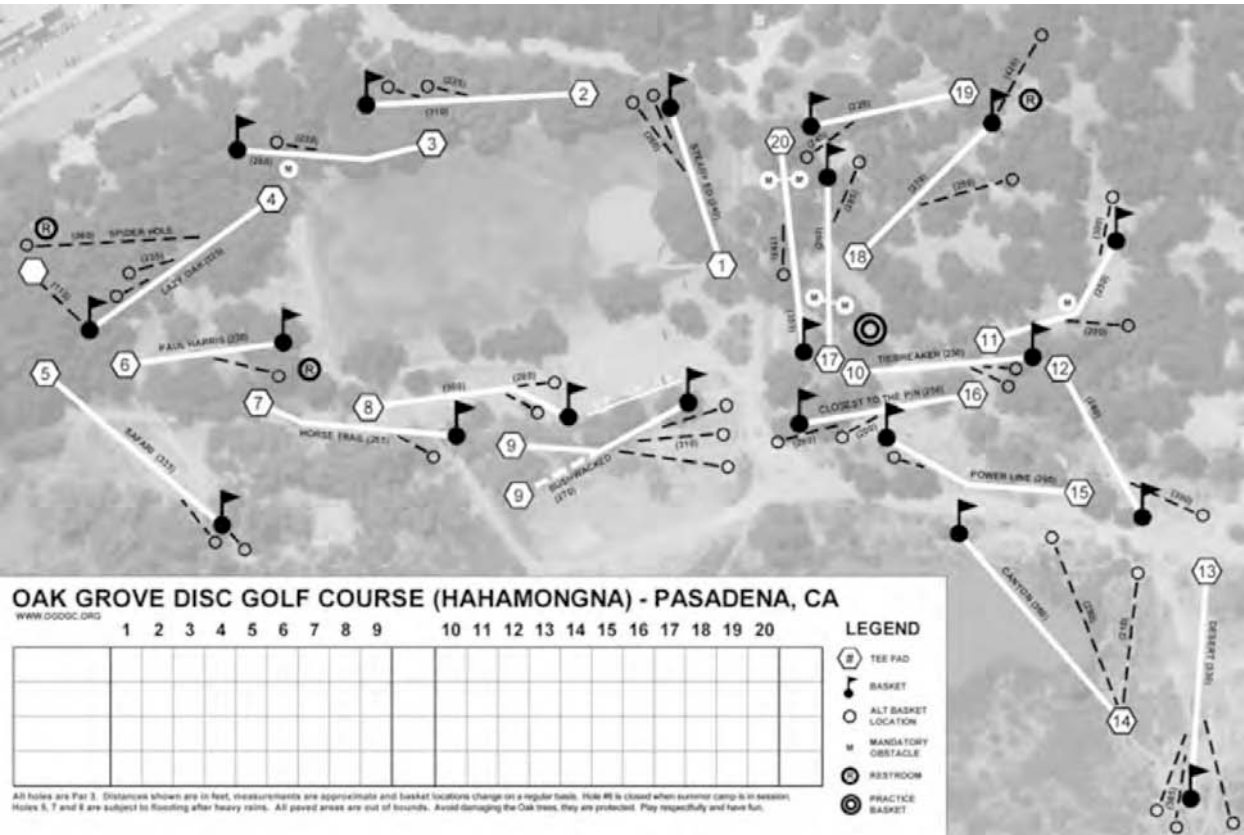


Figure 36. Course map for Oak Grove_TYP I

[Oak Grove course map shown again (Figure 6 previously) for easy reference]

Yucaipa site profile

Yucaipa Regional Park first became the home of a seasonal 18-hole disc golf course in 2006 when baskets (pole-holes) were borrowed from the Mountain High Ski Resort course in winter months thanks to the activism and persistence of local disc golfers who lobbied San Bernardino County Parks and Recreation Department to activate an underutilized area of an otherwise popular regional park (DG Course Review 2013, Appendix E: transcriptions). The course has been permanent since 2010 according to conversations during participant observation and represents typology II, new/urban edge.

A combination of island, corridor and mosaic landscape ecology patterns are evident on the site. Specimen trees, turf grass and naturalized plant communities on the slopes adjacent to the water (resevoirs) and concrete channel are the prevailing plant community types. The site is moderately hilly and tree cover ranges from closed canopy to mostly open.

Queries conducted using the online travel-tool Google Transit indicate that Yucaipa Regional Park is not accessible by public transit. Bicyclists and pedestrians may enter through the gateway on Oak Glen Road for a \$2.00 fee. Although there are single-family residential communities to the south and northeast of the gateway, as well as a large mobile home park to the east where disc golfers may reside, it is more likely that disc golfers would use the free parking at the adjacent Yucaipa Community Center and proceed to bike or walk into the park to save money on the entrance fee; automobiles are charged \$8.00 on weekdays and \$10.00 on weekends/holidays (sbcounty.gov 2013). Yearly parking passes are available for \$190.00 (sbcounty.gov 2013) and several interview subjects commented that they own passes. Other adjacent land uses besides residential include open space/green-space in the form of a community park with fields, sport courts, playgrounds and picnic areas

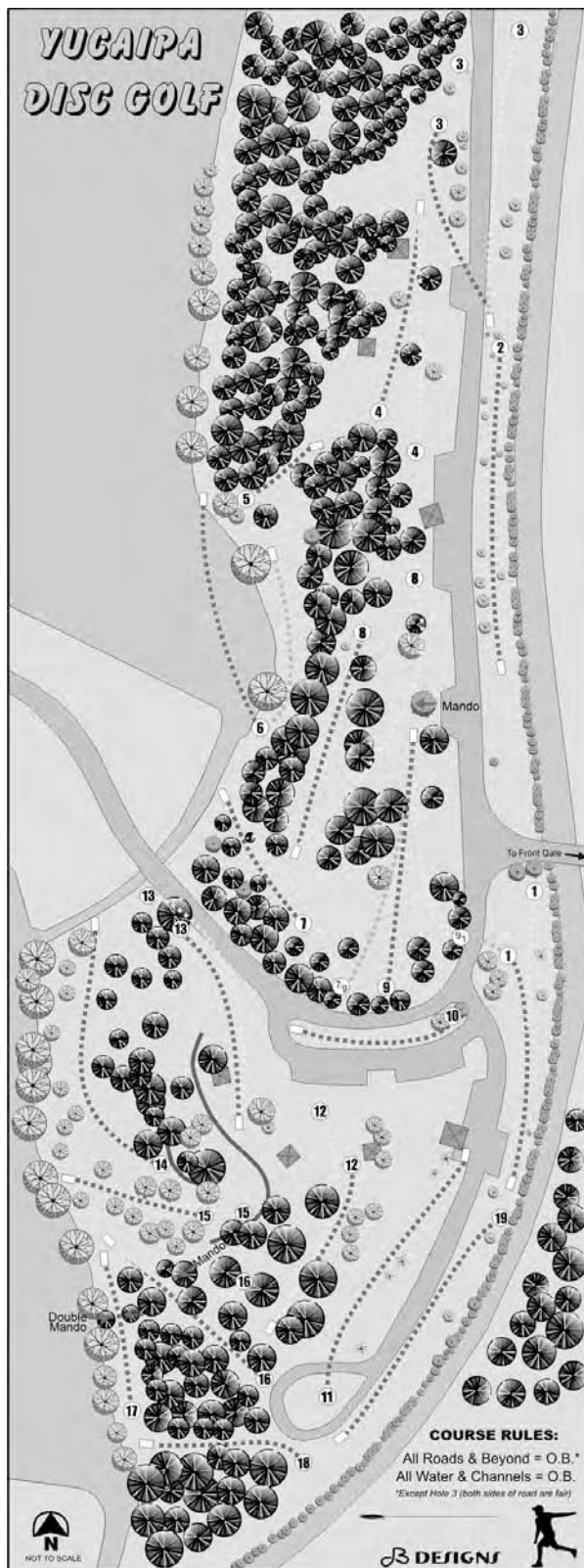


Fig. 37. Course map for Yucaipa_TYP II

bordering the regional park to the east, and mountainous chaparral-covered open space with hiking/mountain biking trail systems to the northwest. The 200-acre park has several parking areas serving different zones of the park. There are 58 parking spaces in the vicinity of the disc golf course. Located at the foot of the San Bernardino Mountains, the park utilizes concrete channeling, earthworks, grassy swales, water bodies and natural vegetation for flood control.

Open sight lines and two restroom buildings favorably address social safety issues, but the course is heavily interspersed with covered picnic areas and fishing along the lake shores, occasionally posing risks from injury by discs as projectiles on busy weekends or holidays, but participant

observation experience revealed considerable caution, restraint and respect for other users of

space, often resulting in skipping a hole and perhaps replaying it later when it became open. A message board at tee-1 had a course map pinned to it and information about upcoming tournaments but the course lacked signage, save for numbers imprinted into the concrete tee pads. Course flow is assisted discontinuously by compacted dirt paths shared with other park users along the lakefront and along park roadways between holes.

Fishing and picnicking are the primary uses that share space with the disc golf course but other activities available nearby include seasonal boating and swimming, soccer fields, jogging paths and numerous recreational vehicle camping sites. On-site circulation includes slow moving motor vehicles, pedestrians and bicyclists who are often accessing/returning from trail networks up in the neighboring hills, according to some interview responses. Of particular interest is that alcohol consumption is permitted – a universal allowance at all San Bernardino County regional parks (sbcounty.gov 2013), which appears to contribute to a vibrant barbecue culture and socially integrated, family oriented activity among disc golfers, based on interviews (Appendix E) and participant observation.

La Mirada site profile

La Mirada Regional Park, in the city of La Mirada, California, was formerly an olive grove, but currently a 100-acre park originally developed in the early 1970's and managed by Los Angeles County Parks and Recreation Department (Van De Hoek 2013). Despite being surrounded by vast urban development and major arterial roads, there are no public transit stops within walking distance (1 mile) of the park. The north and south sides of the park are flanked by dense, well-kept single family residential neighborhoods of idyllic suburban character with quiet streets, which are visually accessible from the park perimeter.

The contrived, highly maintained naturalistic environment could be described in landscape ecology terms as islands and patchwork mosaics. Predominantly 40 year old (Van De Hoek 2013) specimen trees planted alone or in groupings create sparse to closed canopies surrounded by large expanses of well maintained turf. Elevation changes on the open, grassy slopes can be fairly steep but more gradual grades can usually be chosen simply by walking around the landforms to a more gently sloping aspect. The ubiquity of the firm, even turf surfaces eases the strain of walking the slopes.

Immediately to the east is La Mirada High School and a popular public ball golf course which together share one large “superblock” amidst a finer grain urban pattern. Immediately to the west, a small waterpark shares the same city block but is separated from the public park space by a visually permeable fence. The waterpark shares a large parking area with the civic functions of City Hall, the public library and La Mirada Sheriff's Station further west, fronting La Mirada Boulevard. A cemetery occupies the southwest corner of the park's superblock and harbors the last intact remnant of the historic olive grove. Directly across La Mirada Boulevard from the regional park superblock is the Biola University campus and student housing. The original disc golf course is nearly as old as the park itself, having been installed on the undulating grassy knolls that surround a modest manmade lake in 1976.

The park is easily accessible to both pedestrians and bicycles all along the north, east and south sides where the rolling turf grass meets the public sidewalks, offering continuous, unimpeded access from the adjacent residential communities, as well as the high school campus. There are 410 parking spaces in a contiguous linear lot along the north and west sides, inscribed between areas of largely open turf grass. Presently there are two 18-hole disc golf courses; the original lake course on the south side is separated from the “back 18” on the

north side by the majority of the park's intensive recreational programming. An elaborate system of concrete swales, culverts and grassy swales manage stormwater along with an engineered lake circled by paved walkways. There are small pockets that have been left to collect leaf litter and allow natural percolation.

Social safety is quite high given the open sight-lines from within as well as from adjacent neighborhoods. Furthermore, nearly one dozen site visits by this researcher to play disc golf have revealed that perpetual activity from a diversity of users pervades throughout the park. Concomitantly, there is also a higher risk of park users being struck by discs in a multitude of spaces shared by and adjacent to the disc golf hole fairways. Physical comfort and safety is assured by plentiful functioning drinking fountains and well kept bathroom facilities throughout the park. Course wayfinding relies on a combination of painted markings on



Figure 38. Course map fort La Mirada_TYP III

concrete surfaces and laminated signage supported by metal posts adjacent to the tee areas, which take the form of both dedicated concrete pads and borrowed space on paved walking paths. The simple representational graphics on the signs depict each hole layout and designate the current position of the basket, which changes periodically. A pro-shop for disc golf shares space with tennis services between a row of eight tennis courts and acts as a focal point, or meeting place between the two courses. The “back 18” is not shown in Figure 38, but begins a short walk north of the pro shop on the other side of the handball courts.

The park offers several layers of passive and active recreational programming, including 12 tennis courts, 4 softball fields, 6 handball courts, 2 playground areas, 3 covered picnic areas, a stocked fishing lake and a network of paths for walking, bike riding or other forms of wheeled locomotion. Dog walking on the paths and grassy areas is also a common activity. All of this constant activity, along with an abundance of ducks and geese in and around the lake perimeter, offer opportunities for passive observation.

Mountain Pride site profile

Willowglen Park along with land in an adjacent wash owned by the City of Murrieta, CA, at the southern end of the Inland Empire in Riverside County, is the home of what is colloquially known as Mountain Pride disc golf course (the park is accessed along Mountain Pride Drive). In 2011 a 9-hole course was installed in a Willowglen park designed to serve a newer residential community, but by the end of 2012, the course was expanded and redesigned to fit 18 holes (Figure 39) predominantly in the adjacent wash, and patronage increased dramatically, rating a 3.94 with eight reviews recorded (DG CourseReview 2013).

The redesigned course fits typology IV, new/urban center. Only 12 years ago, the area may

have been considered much more rural or urban edge in character. The population of unincorporated Murrieta in 1980 was estimated at 2,200, but by the mid-1980's the community saw the replacement of old highway 395 with interstate 15, opening up easy access too affordable housing close to job centers in San Diego, Riverside, Los Angeles and Orange counties, as well as the neighboring city of Temecula (murrieta.org 2013). By 1991 there were 24,000 residents and by 2005 the population reached 85,000 (murrieta.org 2013). In 2010 the population of Murrieta was 103,466 (Census 2010), exceeding the population of Temecula, driven by residential development. Mountain Pride, typology IV provides an interesting contrast with La Mirada, typology III; new-urban-center residential development versus mature-urban-center residential development.



Figure 39. Course map for Mountain Pride_TYP IV

The landscape ecology can be characterized as a combination of corridor and mosaic patterns. The plant communities include riparian woodland (native and invasive), specimen, turf and disturbed areas along parts of the wash flood terraces, hosting invasive groundcovers. The course overall passes over moderate elevation changes, but offers more dramatic terrain on hole 1 (tee from park area down into wash) as well as holes 12,15 and 16 at the west end of the wash, which all cross a steep valley that drains into a concrete box culvert that passes under interstate 15. The tree cover on the course is moderately wooded to mostly open. Much denser vegetation along the low-flow channel provides an often impenetrable barrier that defines fairways and guides course flow around thicker growth.

Google Transit queries indicate that the park is serviced by Riverside Transit Authority's bus 23 which runs from the city of Wildomar to the north, then to the east and south within the City of Murrieta, but requires a 1/2 mile walk from a stop at Nutmeg and Johnston Drive. The parking area at the main entrance, and a pedestrian walkway between homes further west, provide formal and fluid pedestrian access to the residential community to the north. The residential community to the south can access the park/course by foot via an informal maintenance easement near basket 15 (Figure 39). Of the eleven subjects interviewed, one indicated he regularly bikes from home to the park/course, although he did not on the day of the interview. The parking lot on Mountain Pride Drive consists of 32 stalls, with additional on-street parking available along the curbs/sidewalk. The developed park is easily accessible to wheelchairs from the parking lot to a paved double loop walking path sloping gently westward towards I-15. The park is drained by turf areas and large areas of mulch. The adjacent wash is drained by a combination of a planted slopes, a natural soft-bottom riparian low-flow channel, earthworks and concrete swales/embankments.

Social safety in the park area appeared to be quite high, with open sight-lines, homes along the park edge and the regular movement of park patrons along the paths. The wash area, which more or less has a trapezoidal cross-section, affords sight-lines into much of the open space from a schoolyard high above on the southeast boundary, to the backyards of homes which become nearly level with the wash terraces towards the southwest. Still, there are many areas potentially concealed from view by dense vegetation adjacent to the course routing, especially on the east end of the wash. Conversations during participant observation with course activists revealed that the recent course expansion into the wash has dissuaded vagrant and miscreant activities. Physical safety from discs as projectiles is an issue on the holes previously mentioned on the west end of the wash, because the fairways/flight patterns criss-cross to take full advantage of dramatic valley shots. In fact, this researcher has been following the Murrieta Disc Golf Club (MDGC) Facebook page, where there have been two reports of head injuries at the course since interviews were conducted. Additionally, the online club member discussions have mentioned rattlesnake sightings in the wash, another physical danger (murrieta@groups.facebook.com 2013). The course offers a mixed bag in terms of safety in the form of comfort. Only two portable bathrooms on the parking lot serve park users and there are no drinking fountains on-site. On the other hand, the City of Murrieta has provided new benches and trash cans at many of the tee areas and there are numerous locations to find shade from the sun.

At this time, one small information board on a park path, disassociated with the tee area for hole one, some makeshift directional markings on the ground and the appropriation of park paths, make up the wayfinding dynamics of the course. Course activists indicated that the City is hesitant to allow the installation of signage at the tee areas. Recent Facebook

discussions reveal that a local contractor is donating time to assist replacing the upside-down carpet tee pads with poured concrete pads. The Facebook discussions are active and point to a fervor of positive energy about experiences on the course and informal tee-time arrangements. Participant observation after conducting interviews also revealed that the new course configuration has solved conflict issues with residents along the developed park area and that the other dominant park users – dog walkers and leagues/groups that use the one softball field – are not in conflict with the disc golf activity (there are now only five holes within the park instead of nine).

To conclude the site profile evaluations, photographic character studies (Figure 40) provide eye-level visual perspectives of each course typology. The photographs reinforce the narrative descriptions above, especially as they relate to the landscape ecology and operational dimensions of the sites shown as graphic snapshots in Table 12.

PHOTOGRAPHIC CHARACTER STUDIES

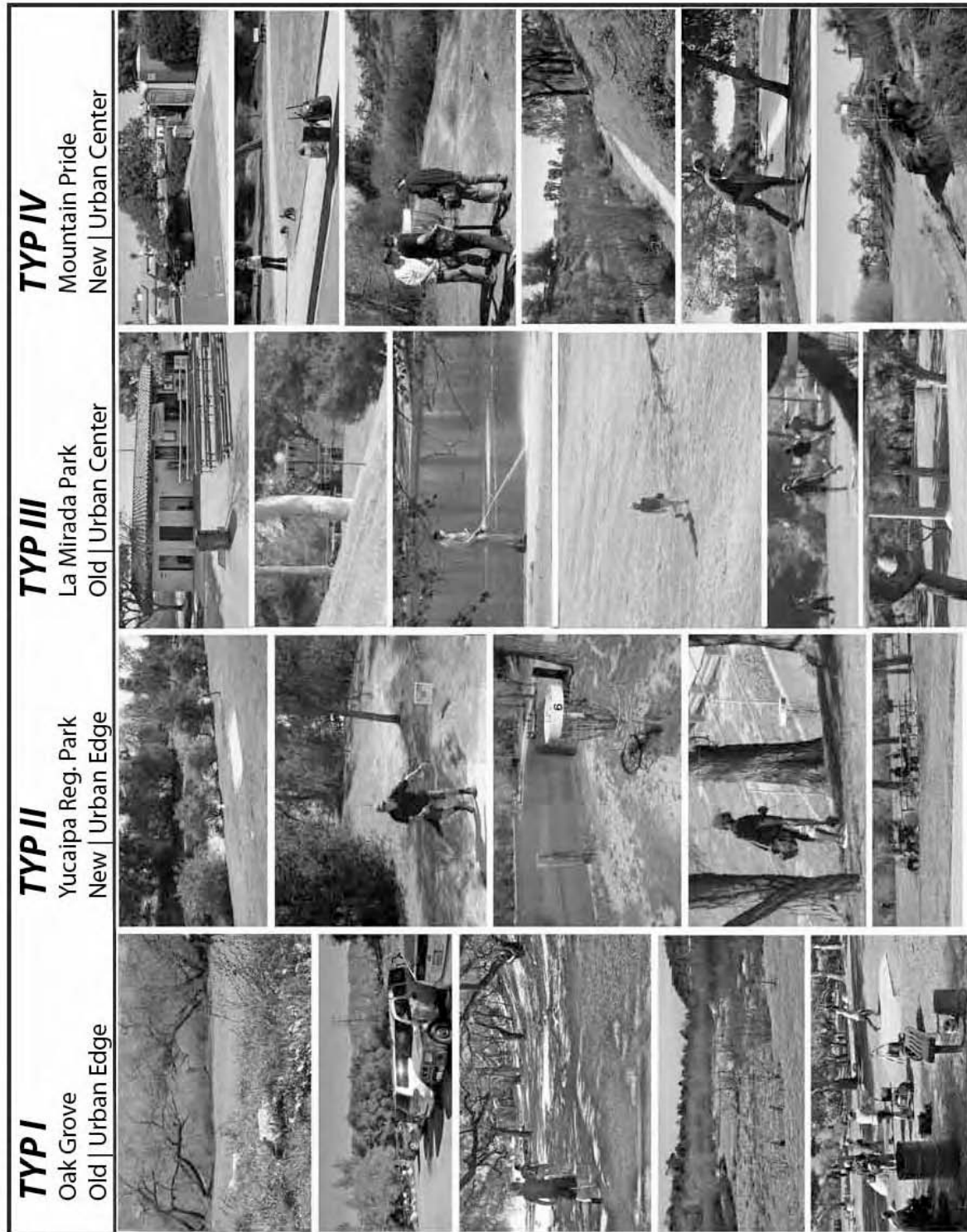


Figure 40. Photographic character studies (photos by M. Plansky)

Demographic results

All forty-four interview respondents voluntarily provided information about themselves in nine categories (Appendix C and E). The results for each typology are summarized in the tables and graphs below. Discreet answers were recorded for six of the categories. Subjects were asked to place themselves in ranges for both *age* and *income* in order to reduce the personal intrusiveness of the encounter and to streamline analysis. Additionally, subjects were asked to self-identify their *ethnicity*. Cells highlighted in yellow point out anomalous results in data columns which otherwise indicate homogenous results, such as *gender*, *travel mode* and *PDGA* membership (Yes or No).

The distance traveled to the course by each subject was estimated in the tables below by utilizing Google Maps queries of distance from the respective park to the subjects' stated city of residence (city center as determined by Google Maps). When subjects lived in the same municipality as the course they were patronizing, they were asked to estimate their travel distance to their home. Following the tables and graphs are four residence distribution maps (Figures 45-48), corresponding to each typology, which spatially represent the *residence & distance* data columns. It is interesting to compare these maps to the population density map presented in Chapter 3 (Figure 26). While outliers are not shown graphically on these maps with orange dots, the locations are noted as "off map". It was surprising how little geographical overlap there was between the typologies. The only instance of overlap was between La Mirada, typology III, and Mountain Pride, typology IV, both recording subjects residing in Aliso Viejo, CA in Orange County: a region lacking in favorably rated 18-hole courses (DG CourseReview 2013). Oak Grove, typology I, and La Mirada, typology III, the two old courses, are closest together (Figure 25) and in the densest areas (Figure 26), yet

Table 13. Typology_I demographics, Oak Grove

	Gender	Age	Ethnicity	Marital Status	Income	Residence (Fig. 45) & distance (mi)	Travel Mode	Highest Education	PDGA?
A	M	46-55	Latino	Married	20-40K	La Canada Flintridge(LCF) 2	auto	Bachelors	N
B	M	26-35	Latino	Single	20-40K	Sherman Oaks 22	auto	Some college	N
C	M	26-35	Latino	Single	40-60K	San Dimas 24.8	auto	High School	N
D	M	46-55	Native Am.	Married	40-60K	Duarte 4.1	auto	Some College	Y
E	M	18-25	Asian	Single	0-20K	N. Hollywood 20.3	auto	Some College	N
F	M	46-55	Native Am.	Single	20-40K	S. Pasadena 5.8	auto	High School	N
G	M	55-65	Caucasian	Single	40-60K	Burbank 13.6	auto	Some College	N
H	M	26-35	Caucasian	Single	20-40K	N. Hollywood 20.3	auto	High School	Y
I	M	18-25	Black	Single	0-20K	Los Angeles 13.4	auto	Some College	N
J	M	56-65	Caucasian	Married	40-60K	Arcadia 11.9	auto	Associates	N
K	M	18-25	Caucasian	Married	40-60K	LCF 2	bike	Bachelors	N

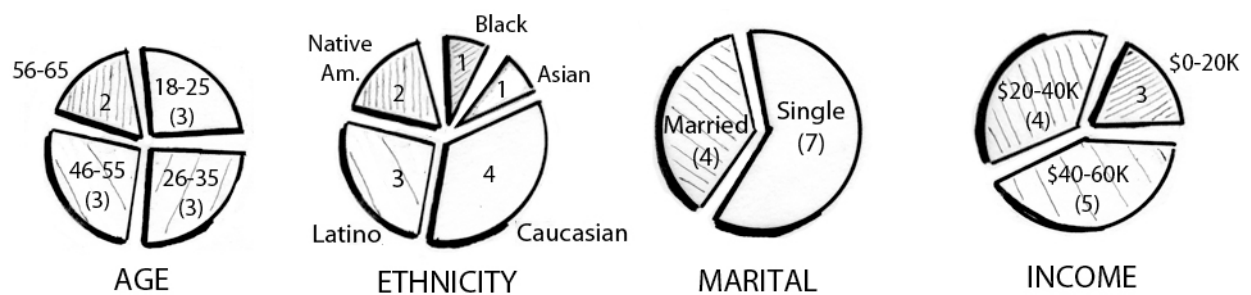


Figure 41. Demographic breakdown at Oak Grove (TYP I)

seem to have regionally loyal patrons – the data showed no geographical overlap.

That Oak Grove subjects had the most ethnic diversity seemed to correlate with its location closest to the Los Angeles' urban core. Oak Grove also recorded the only instance in this study of a respondent arriving at a course by a travel mode other than a private automobile (bicycle). Oak Grove results show perhaps the most diversity in educational backgrounds of the four typologies and ranks 2nd among typologies in the number of respondents who reported they were married (4). Although only two subjects reported they were PDGA members, many acknowledged involvement with the local disc golf club.

Table 14. Typology_II demographics, Yucaipa

	Gender	Age	Ethnicity	Marital Status	Income	Residence (Fig.46) & distance (mi)	Travel Mode	Highest Education	PDGA?
A	M	46-55	Caucasian	Married	80K+	Redlands 9	auto	Masters	Y
B	M	18-25	Caucasian	Single	0-20K	Escondido 83.6	auto	Some college	N
C	M	46-55	Caucasian	Married	40-60K	Yucaipa 3	auto	Some college	Y
D	M	18-25	Caucasian	Single	0-20K	Yucaipa 2	auto	Some college	N
E	M	36-45	Caucasian	Single	40-60K	Apple Valley 66.9	auto	Some college	N
F	M	46-55	Caucasian	Single	40-60K	Highland 15	auto	Bachelors	N
G	F	26-35	Latina	Married	20-40K	Yucaipa 2	auto	Some College	N
H	M	26-35	Caucasian	Married	40-60K	Yucaipa 2	auto	Some College	N
I	M	36-45	Caucasian	Married	40-60K	Yucaipa 1	auto	Bachelors	N
J	M	18-25	Caucasian	Single	0-20K	Loma Linda 15.5	auto	Some College	N
K	M	46-55	Latino	Divorced	60-80K	Yucaipa 3	auto	Associates	N

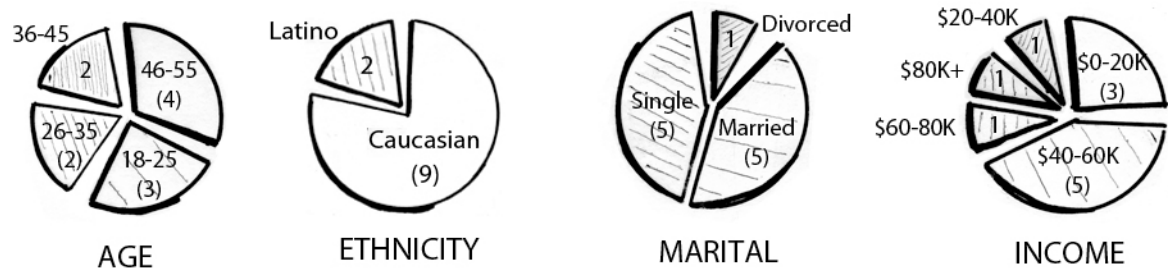


Figure 42. Demographic breakdown at Yucaipa (TYP II)

Yucaipa's demographic results had the highest income ranges which correlates with a generally high level of education and having the most married respondents of the four typologies. One of only three female disc golfers captured in this study was interviewed at Yucaipa. Only two respondents of eleven reported that they were PDGA members. Of particular interest is that more than half of the subjects (6), identified their place of residence to be within the City of Yucaipa. Besides two outliers – Apple Valley, 66.9 miles and Escondido, 83.6 miles (Figure 46), disc golfers interviewed at Yucaipa reported living within 16 miles of the course, although all drove an automobile to get there.

Table 15. Typology_III demographics, La Mirada

	Gender	Age	Ethnicity	Marital Status	Income	Residence (Fig. 47) & distance (mi)	Travel Mode	Highest Education	PDGA?
A	M	26-35	Caucasian	Single	20-40K	Long Beach 20.3	auto	Bachelors	Y
B	M	26-35	Latino	Married	20-40K	Ontario 31.3	auto	Some college	N
C	M	18-25	Caucasian	Single	0-20K	La Mirada 2	auto	Some college	Y
D	M	36-45	Caucasian	Single	40-60K	La Mirada 1	auto	High School	Y
E	M	18-25	Latino	Single	20-40K	Anaheim 9.7	auto	High School	N
F	M	26-35	Latino	Single	0-20K	Hawthorne 23.9	auto	High School	Y
G	M	26-35	Caucasian	Single	40-60K	Buena Park 4	auto	Some College	N
H	M	26-35	Caucasian	Single	40-60K	Norco 36.7	auto	Some College	N
I	M	36-45	Caucasian	Single	40-60K	Aliso Viejo 32.9	auto	Some College	N
J	M	26-35	Caucasian	Single	0-20K	San Diego 105	auto	Some College	N
K	F	26-35	Caucasian	Married	40-60K	Redondo Bch 26.7	auto	Bachelors	N

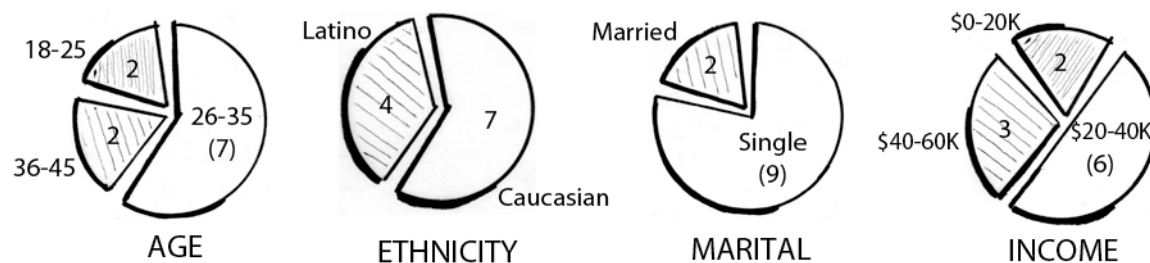


Figure 43. Demographic breakdown at La Mirada (TYP III)

Interview respondents at La Mirada were the youngest overall of the four typologies. Nine of eleven were between age 18 and age 35, and no one interviewed was over 45 years old. One of the three females interviewed in this study was at La Mirada. Subjects interviewed at La Mirada indicated education levels on the lower end of the spectrum, similar to subjects at Oak Grove. Both are old courses near larger concentrations of population than the newer courses in this study (Figure 26). The geographic distribution of subjects appears to be the most widespread of the four typologies (Figure 47), perhaps due in part to its focal location in relation to the Los Angeles region's population centers in all directions, and perhaps also due to its draw for having two reputable 18-hole courses in one park.

Table 16. Typology_IV demographics, Mountain Pride

	Gender	Age	Ethnicity	Marital Status	Income	Residence (Fig. 48) & distance (mi)	Travel Mode	Highest Education	PDGA?
A	M	18-25	Latino	Single	20-40K	Corona 32.1	auto	Some college	N
B	M	36-45	Caucasian	Single	20-40K	Murrieta 3	auto	Some college	N
C	M	36-45	Latino	Single	20-40K	Mira Loma 40.1	auto	Some college	Y
D	M	46-55	Caucasian	married	80K +	Temecula 8.4	auto	Bachelors	Y
E	M	36-45	Caucasian	Single	20-40K	Murrieta 1	auto	Some college	N
F	M	26-35	Caucasian	Single	0-20K	Lake Elsinore 10.8	auto	High School	Y
G	M	26-35	Caucasian	Married	40-60K	Wildomar 6	auto	Some College	N
H	M	36-45	Caucasian	Single	20-40K	Murrieta 3	auto	Bachelors	N
I	F	26-35	Caucasian	Single	20-40K	Aliso Viejo 48.2	auto	Associates	N
J	M	56-65	Caucasian	Single	80K +	Escondido 37.1	auto	Bachelors	N
K	M	18-25	Caucasian	Single	20-40K	Temecula 8.4	auto	Some college	N

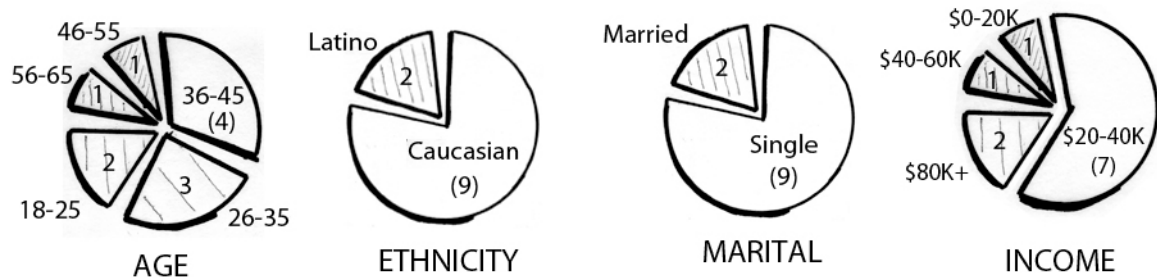


Figure 44. Demographic breakdown at Mountain Pride (TYP IV)

Along with Yucaipa, the other “new course” typology, demographic survey results at Mountain Pride indicated lower ethnic diversity than the older course typologies. At Mountain Pride seven respondents fell into the \$20,000 to \$40,000 annual income range, showing what could be characterized as a “working class” tendency at this course typology. With three subjects acknowledging PDGA membership and others indicating active participation in the newly formed local club, “Murrieta Chain Rattlers”, Mountain Pride's emerging disc golf culture appears most involved in organized activity of the four typologies based on interview and survey results. Perhaps there are correlations between “working class”, “emerging cultures” and “organized participation”?

Table 17. Overall demographic results

AGE	range	#	%	cum.%	GENDER	Male	41
	18-25	10	23%	23%		Female	
	26-35	15	34%	57%	ETHNICITY		29
	36-45	8	18%	75%		Caucasian	
	46-55	8	18%	93%		Latino	
	56-65	3	7%	100%		Native American	
	66+	0	---	---		Asian	
						Black	
INCOME/YR	range	#	%	cum.%	MARITAL STATUS	Single	30
	\$0-20K	8	18%	18%		Married	
	\$20-40K	18	41%	59%	TRAVEL MODE	Divorced	43
	\$40-60K	14	32%	91%		Automobile	
	\$60-80K	1	2%	93%		Bicycle	
HIGHEST EDUCATION	\$80+	3	7%	100%	PDGA MEMBER?	Yes	10
	category	#	%	cum.%		No	
	High School	7	16%	16%			34
	Some College	24	55%	71%			
	Associates	3	7%	78%			
	Bachelors	9	20%	98%			
	Masters	1	2%	100%			

Table 17 presents the overall demographic results from the four typologies combined, excluding “place of residence” which is presented in Figures 45 to 48, for each typology. The mode for each category is shown in bold. A composite profile of a disc golfer in this study based on mode would read: Single white male, age 26-35, with some college education, an annual income between \$20,000 and \$40,000, who does not belong to the Professional Disc Golf Association and traveled to the course by automobile. Compared to PDGA demographics (Figure 12) the cross section of Southern California disc golfers interviewed for this study have less education and lower annual incomes, although the age distribution matches well.



Figure 45. Travel mapping at Oak Grove (TYP I)

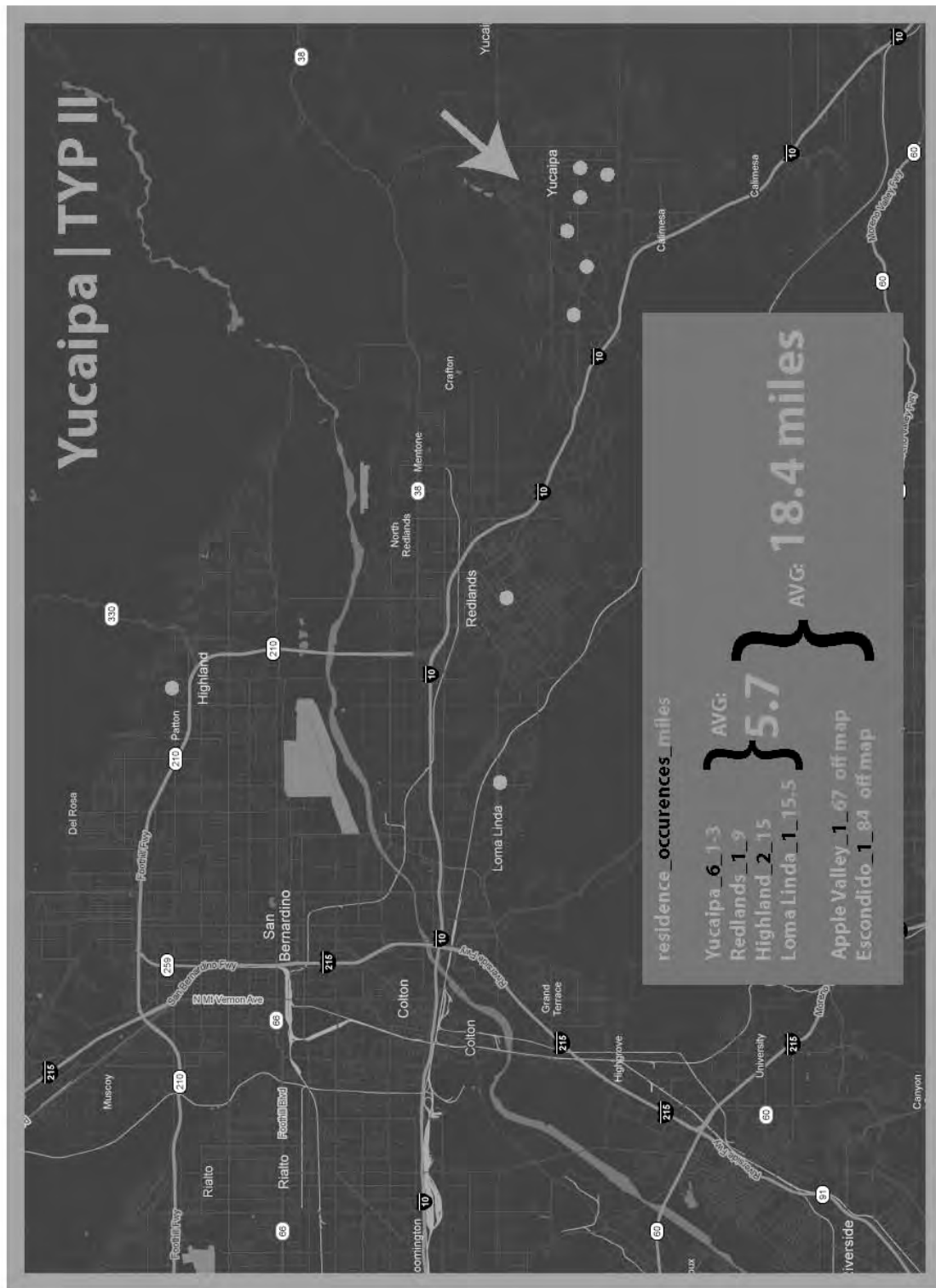


Figure 46. Travel mapping at Yucaipa (TYP II)

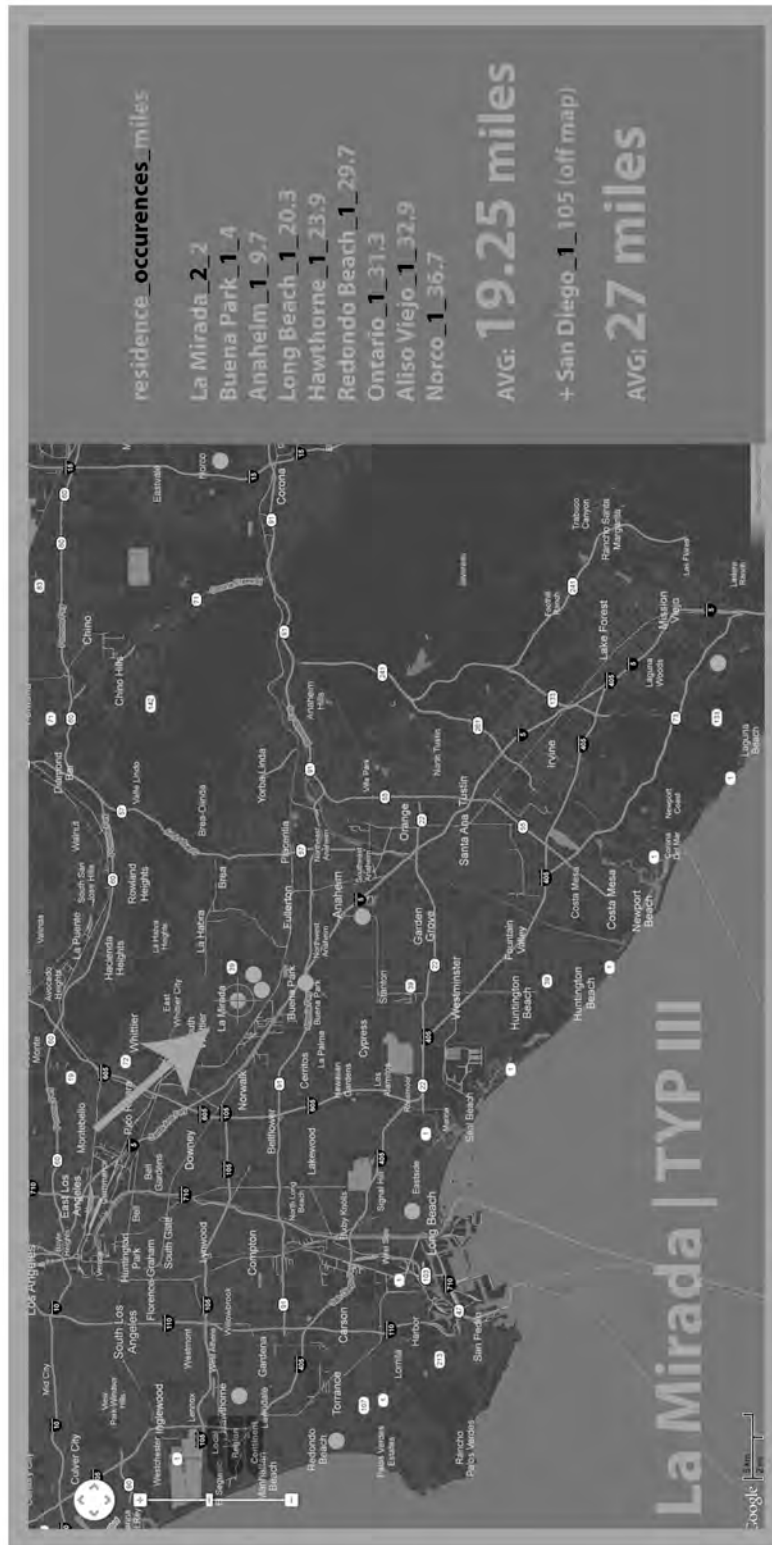


Figure 47. Travel mapping at La Mirada (TYP III)

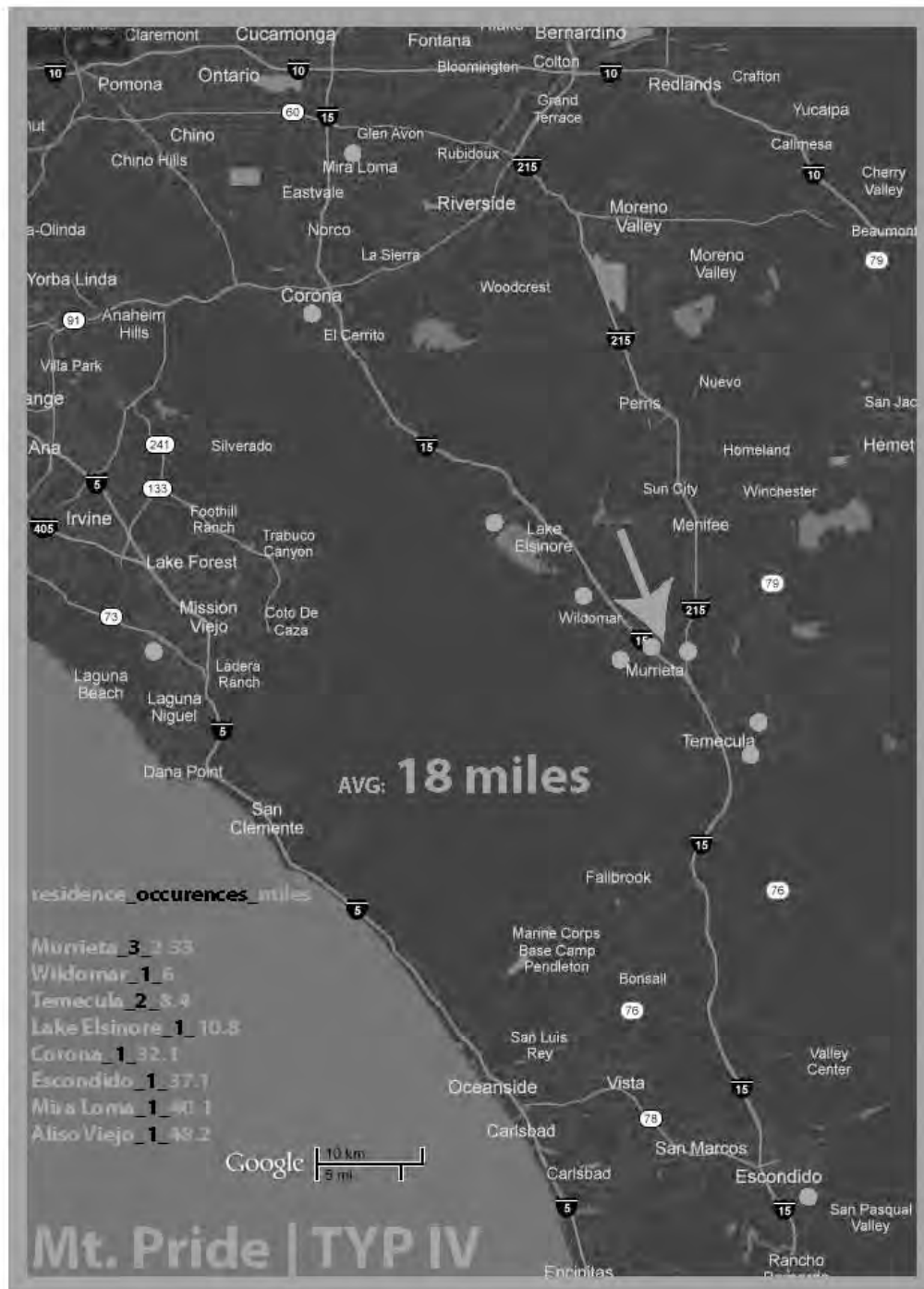


Figure 48. Travel mapping at Mountain Pride (TYP IV)

Interview question analyses

The third part of inventory and analysis is the most qualitative and also the least prevalent type of data available about disc golf. The content analysis that follows the thematic definitions of each of the seven interview questions represents an earnest foray into the study of disc golf as a lifestyle sport in the tradition of Wheaton (2000, 2004) and her colleagues. The iterative process of defining and organizing categories based on the targeted themes begins to evince a sociocultural understanding of the Southern California disc golfers sampled in this study, with the ultimate intent of relating these results to site evaluations, demographics and literature.

Question 1: *How were you introduced to disc golf?*, targeted the theme of “gateway”, that is, discovering what circumstances led the interviewee to initially become involved with disc golf as a participant. Transcriptions revealed that this question was most often answered with a curt response, but sometimes with a more elaborate story explaining the respondent's first experience playing disc golf. Respondent IV-J said the following:

I played there (Oak Grove) back in the late '70s. I was living in Pasadena back then and my co-worker got me into it – actually started playing with regular frisbees – mm, I was already into chucking frisbees at the beach, doing a little freestyle – loved the way they flew, but once I played disc golf – that was more interesting. (Appendix E,, p.20)

In this case the respondent gave more information than most other respondents to this question. The additional information about prior involvement with Frisbee sports could reinforce themes targeted in later questions. While most respondents offered an exact number of years and/or months since they were introduced to disc golf, an approximation of 25 years was recorded for this individual, and the category of *co-worker* was assigned following an iterative process of identifying, defining and tallying categories. Thirty six (82%) respondents were introduced to disc golf by people with whom they had a definable

relationship, while the remaining respondents either began playing disc golf through self-discovery (seven) or through media (one: video game). The results of the content analysis for interviews at each typology are shown with ranked tally marks followed by corresponding %/typology. Headings show the range and average (mean) number of years or months since respondents began playing. An overall summary of the combined typologies concludes, showing the number and percent of the seven categories coded for introduction to disc golf.

TYP_I: yrs ago: 15/5/6/41/7/20/2/9/.2/12/6 AVG: 11.2

friends	///// I	55%
family	///	27%
self discovered	//	18%

TYP_II: yrs ago: 37/1.5/34/.5/.33/15/2/3/2/3 AVG: 8.94

friends	/////	46%
self discovered (little league/mt biking/college)	///	27%
family	//	18%
spouse/partner	/	9%

TYP_III: yrs ago: 2/4/5/14/.75/1/15/2/32/5/7 AVG: 7.97

friends	/////	46%
family	///	27%
co-worker	/	9%
media:video game	/	9%
roommate	/	9%

TYP_IV: yrs ago: 1/6/3/20/13/15/3/17/2/25/3 AVG: 9.8 years

friends	////	36%
family	///	27%
self discovered (interest in frisbee)	//	18%
spouse/partner	/	9%
co-worker	/	9%

OVERALL Q1 SUMMARY | AVG: 9.24 years since being introduced

friends	20	46%
family	11	25%
self discovered	7	16%
spouse/partner	2	4.5%
co-worker	2	4.5%
media: video game	1	2.3%
roommate	1	2.3%

Question 2: *Why do you continue to play to this day?*, targeted the theme of “attraction to the game”, that is, why the respondent stuck with the game after being introduced (or re-introduced) to disc golf and what aspects of the activity specifically keeps bringing them back. For question 2 and question 3, it was instructive to reference Sinisalchi's (2005) community and personal benefits categories of disc golf listed on page 32 of the Chapter 1: Background. This referencing was done cautiously, with the understanding that although the benefits of disc golf are often also attractions, the two are not the same measure: benefits may or may not be ancillary to what attracts an individual to disc golf.

Invariably respondents discussed multiple reasons why they are attracted to disc golf in a broad sense. Nonetheless, it was generally easy to discern a primary and a secondary reason why they play. When it was unclear to the researcher during the interview, a prompt was injected into the “conversation” to clarify which reason was a more significant attraction for that individual. A majority of respondents offered two strong reasons, and although most offered further reasons, tone of speech and language of respondents usually indicated that these reasons were subordinate to the primary and secondary reasons. Accordingly, results from question 2 are listed in tables showing both primary and secondary categories for each typology, preceded by a “coding agenda” example illustrating the process for one subject at each typology with transcription excerpts shown in red. Categories were determined by an iterative process of identifying and combining common words, phrases and meanings from the transcriptions. Category definitions helped to devise the rules for coding (Mayring 2000).

Table 18. Coding agenda example I-J for **Q2: Why do you continue to play to this day?**

Subject I-J	Category	Definition	Transcription Example	Coding
	Flight of the disc PRIMARY	Subject emphasizes a fascination with the physics of flight; (1) rotation, (2) technique, (3) disc design or (4) aesthetic appreciation of flight patterns, in response to question 2	<i>“ I'm a really technical kind of guy, and the shapes and the weights (of the discs) and techniques ...still...that's what keeps me coming back”</i>	At least one of the criteria in the definition is evident in response. Designated as PRIMARY because it was first answer offered and it was emphasized: <i>“...that's what keeps me coming back”</i>
	Escape from routine SECONDARY	Subject identifies disc golf as a (1) distraction (2) a way to forget about personal troubles (3) a way to forget about stress from work, or (4) a way to find emotional or spiritual balance by changing physical setting	<i>“It's relaxing, it's a distraction, something to get involved with away from home, stress, you know.”</i>	At least one of the criteria in the definition is evident in response. Designated as SECONDARY because researcher had to prompt subject for another motivation

Table 19. TYP I, Q2: *Why do you continue to play to this day?* summary

CATEGORY	Primary	Secondary	Subtotal	%
challenge: competition with others	4	1	5	45
flight of the disc	2	2	4	36
good people: camaraderie	0	4	4	36
active exercise	2	0	2	18
affordability	1	0	1	9
challenge; self improvement	1	0	1	9
easy to learn	1	0	1	9
relaxed social atmosphere	0	1	1	9
time convenience	0	1	1	9
escape from routine	0	1	1	9
Total	11	11	22	

Oak Grove, typology I, OLD/URBAN EDGE, showed the highest instance of the category “challenge: competition with others” of all of the typologies. Four of these five respondents fit the primary attraction classification for this category. Almost half of the eleven (5) respondents coded for the category. Collectively, respondents at Oak Grove had been playing the longest (Q1). Long traditions as the first permanent disc golf course and the figure-8 course routing configuration, which makes it easy to play nine holes at a time, may have influenced Oak Grove respondents to adopt a stronger drive to compete with others.

The category “good people: camaraderie”, which coded four times as a secondary reason for playing disc golf, appeared related to competitive drive such that its intensity provided fodder for social interaction. The category “easy to learn” was coded as a unique attraction of all forty-four interview respondents to question 2. The numbers highlighted indicate where the categories for respondent I-J were coded, which relates to table 18. The category “relaxed social atmosphere” was coded once at Oak Grove and twice more in this study. It was considered distinct from the category “good people: camaraderie” because that definition does not address intensity of social interaction (Table 24). Respondents coded for this

category cited the social “uptightness” of ball golf as a counterpoint to disc golf being more relaxed.

Table 20. Coding agenda example II-C for **Q2: Why do you continue to play to this day?**

Subject II-C	Category	Definition	Transcription Example	Coding
	Active Exercise PRIMARY	Subject uses words that suggest (1) physical activity (2) exercise (3) healthy or physically therapeutic, or (4) sweat or move around, in response to question 2	<i>“ Uh, outdoors, exercise”</i>	At least one of the criteria in the definition is evident in response. Designated as PRIMARY because it was first answer offered promptly
	Challenge; self improvement SECONDARY	(1) Subject identifies disc golf as a challenge or a test of skill and (2) emphasizes individuality or the value of personal improvement from playing disc golf	<i>“you're testing yourself against the course – you run competitions, but every time you go out and play you don't need anyone else there because it's just a challenge of you against the course; so it's a wonderful individual sport”</i>	Subject's response met BOTH of the criteria in the definition. Designated as SECONDARY because it was the second reason given and subject had to pause before explaining

Respondents at Yucaipa, typology II, NEW/URBAN EDGE, were most frequently coded for “flight of the disc”, “active exercise”, and “good people: camaraderie” as attractions to disc golf in general. The ranking hierarchy agenda used in the typology-specific tables presented for question 2 defer first to the category subtotal, and second to the larger number of primary versus secondary classification in cases of an equal subtotal. In this case, “active exercise” is clearly ranked above “good people: camaraderie” by way of the second measure. The category “moral support and fellowship” was coded as distinct from “good people: camaraderie” when disc golf was reported to be a socially-based activity that promoted an individual's effort to use the sport to address acute physical and/or mental conditions.

In this study, such was the case for subject II-B only, who reported losing over 150 pounds

by playing disc golf and the social support system that came with it. In this subject's case “active exercise” was coded as his secondary classification, based on his strong primary emphasis on fellowship and community support. Faced with an alarming global obesity epidemic (Assadourian 2012), the category “moral support and fellowship” could be an important measure in larger sample sizes for course designers interested in addressing obesity with disc golf. Other categories such as “spontaneity” which was coded only once, to identify a respondent's affinity for participation in disc golf to spark the meeting of new people and having new, unexpected experiences, may also be more relevant in larger samples. In a larger sample these socially-based categories may work well as subsets of “good people: camaraderie”. For example, the socially-based attractions for Yucaipa respondents may total six, as indicated by the red asterisks in Table 21. Yucaipa was also the only typology which was not coded for the category “challenge: competition with others”, as a primary or secondary attraction to playing disc golf in general.

Table 21. TYP II, Q2: *Why do you continue to play to this day?* summary

CATEGORY	Primary	Secondary	Subtotal	%
flight of the disc	2	2	4	36
active exercise	3	0	3	27
good people: camaraderie*	0	3	3	27
escape from routine	1	1	2	18
challenge: self improvement	0	2	2	18
wooded; nature experience	1	0	1	9
family activity*	1	0	1	9
moral support and fellowship*	1	0	1	9
relaxed social atmosphere*	0	1	1	9
time convenience	0	1	1	9
landscape variety	0	1	1	9
landscape nostalgia	0	1	1	9
spontaneity	0	1	1	9
Total	11	11	22	

* socially based attraction

Table 22. Coding agenda example III-I for Q2: *Why do you continue to play to this day?*

Subject III-I	Category	Definition	Transcription Example	Coding
	Landscape variety PRIMARY	Subject describes some aspect of the course character that is an attraction from hole to hole or over time such as (1) vegetation, (2) course routing, (3) elevation, (4) ground plane, or (5) wind exposure/orientation	<i>"every day is different out on the course – so that's what keeps you playing, you know – cuz you can improve, but there's always going to be things in your way like trees or any turn on the course that makes it interesting there's always something new even if you've played the same course frequently"</i>	At least one of the criteria in the definition is evident in response. In this case two – Designated as PRIMARY because it was first answer offered without a prompt
	Challenge; self improvement SECONDARY	(1) Subject identifies disc golf as a challenge or a test of skill and (2) emphasizes individuality or the value of personal improvement from playing disc golf	<i>"For me it's typically a personal challenge, cuz, um as a chick (quick chuckle) my throws don't always go as far"</i> <i>I don't typically keep track with a scorecard either, so it's just the energy of getting towards the hole and feeling successful when it's a par..."</i>	Subject's response met BOTH of the criteria in the definition – Designated as SECONDARY because it the response required a prompt for another attraction to disc golf

Respondents at La Mirada, typology III, OLD/URBAN CENTER, made up more than half of the coded category instances of “affordability” among all four typologies. This result seems consistent with the demographic results showing the lowest income-ranges and youngest age-ranges of the four typologies. It could be surmised that as the OLD/URBAN CENTER typology, that La Mirada is accessible to more young, lower income disc golfers than the EDGE typologies (not encompassed by urban population in all directions) or the NEW typologies, which could be characterized as more suburban and reported the higher income ranges. Disc golfers interviewed at La Mirada appear distinct from those at Oak Grove, the other OLD course, not only geographically, despite their relative closeness to each other, but also by increased emphasis on the challenge of “self-improvement” over “competition”. Regardless of such differences respondents at all typologies were often coded for the

category “flight of the disc”. Along with the top ranked category “good people: camaraderie”, these were the two most highly ranked overall attraction categories (Table 26), despite the coding agenda process which led to a further bifurcation of socially-based categories.

Table 23. TYP III, Q2: Why do you continue to play to this day? summary

CATEGORY	Primary	Secondary	Subtotal	%
flight of the disc	2	2	4	36
affordability	3	1	4	36
good people; camaraderie	1	2	3	27
challenge: self-improvement	1	2	3	27
landscape variety	1	1	2	18
escape routine	1	1	2	18
wooded; nature experience	1	0	1	9
challenge: competition with others	1	0	1	9
relaxed social atmosphere	0	1	1	9
time convenience	0	1	1	9
Total	11	11	22	

At Mountain Pride, typology IV, NEW/URBAN CENTER, the category that stands out as an important attraction to playing disc golf is “good people: camaraderie”, with seven instances coded. Coming in a close second, if the categories were to be combined, are the two versions of “challenge” that attracts Mountain Pride respondents, with six instances coded. Also of interest is two instances of the category “wooded: nature experience”. Participant observation and following active Facebook discussions by local club members reveal that the new course layout that incorporates the “rustic” (respondents IV-F, IV-G) character of the naturalistic wash adjacent to the developed park, has value for its wooded feel and opportunities to see wildlife. Enthusiasm for and exposure to the new layout may have influenced the overall appreciation of a wooded, nature experience for the two respondents who were coded for the category. The unique categories of “people watching” and “mental strategy” also were coded from Mountain Pride interviews, as primary

attractions. The category “people watching” is defined as being attracted to playing disc golf for the opportunity to observe disc golfer and/or other park-user behaviors at a course. The category “mental strategy” is differentiated from “challenge: self-improvement” when a respondent emphasizes an attraction to exploiting the cognitive elements of the game, such as strategic positioning of shots, or psychological gambits with oneself or others.

Table 24. Coding agenda example Q2, TYP II

Subject IV-C	Category	Definition	Transcription Example	Coding
	Active Exercise PRIMARY	Subject uses words such as (1) physical activity (2) exercise (3) healthy or physically therapeutic, or (4) sweat or move around, in response to question 2	<i>“It’s a cool, active hobby, instead of playing video games, it gets you outside. I get out, walk around, some courses have hills..... well, most courses have hills, and its good just walking, you know, good exercise</i>	At least one of the criteria in the definition is evident in response – Designated as PRIMARY because it was first answer offered promptly
	Good people; camaraderie SECONDARY	Subject indicates that the value of interacting with other disc golfers who are (1) friendly, (2) supportive, or (3) engaging, is an attraction to playing the game.	<i>“you always meet cool people....the people who are normally playing disc golf are real chill, real nice, helpful, so you know it’s never a bad experience”</i>	Subject’s response met at least one of the criteria in the definition – Designated as SECONDARY because it was the second reason freely given

Table 25. TYP IV, Q2: *Why do you continue to play to this day?* summary

CATEGORY	Primary	Secondary	Subtotal	%
good people; camaraderie	3	4	7	64
challenge; competition with others	1	2	3	27
challenge; self-improvement	1	2	3	27
affordability	2	0	2	18
wooded: nature experience	0	2	2	18
active exercise	1	0	1	9
flight of the disc	1	0	1	9
people watching	1	0	1	9
mental strategy	1	0	1	9
escape from routine	0	1	1	9
Total	11	11	22	

The overall attraction rankings from the entire sample of interviews coded for the four typologies (44), are shown in Table 26. The darkest shade of grey indicates categories that were coded for respondents at all four typologies (UNIVERSALITY). Ranks 4 to 9 are highlighted in a lighter grey and represent categories that were coded at three of the four typologies. Possible biases for these rankings are indicated in the column **“CHARACTERIZATION”**. The **“P”** column, which represents the number of “primary attraction” responses, and the **“S”** column, which represents the number of “secondary attraction” responses, aid in the hierarchy ranking agenda when the attraction category (mode) is equal, whereas categories coded with a higher number in the **“P”** column, rank higher. Lower case letters following rankings of equal value simply indicate different categories at the same level and are listed in order of typology occurrence, from I to IV. A total of eighty-eight responses were coded as categories; forty-four primary and forty-four secondary.

Table 26. Overall disc golf attraction rankings, **Q2: Why do you continue to play to this day?**

RANK	ATTRACTION CATEGORY (MODE)[%]	P	S	TYP(S)	CHARACTERIZATION
1	Good people; camaraderie (17)[39]	4	13	I/II/III/IV	UNIVERSALITY
2	Flight of disc (13)[29]	7	6	I/II/III/IV	UNIVERSALITY
3	Challenge; self-improvement (9)[20]	3	6	I/II/II/IV	UNIVERSALITY
4	Challenge; competition with others (9)[20]	6	3	I/III/IV	OLD/CENTER BIAS
5	Affordability (7)[16]	6	1	I/III/IV	OLD/CENTER BIAS
6	Active exercise (6)[14]	6	0	I/II/IV	NEW/CENTER BIAS
7	Escape from routine (5)[11]	2	3	I/II/III	OLD/EDGE BIAS
8	Wooded; nature experience (4)[9]	2	2	II/III/IV	NEW/CENTER BIAS
9a	Relaxed social atmosphere (3)[7]	0	3	I/II/III	OLD/EDGE BIAS
9b	Time convenience (3)[7]	0	3	I/II/III	OLD/EDGE BIAS
10	Landscape variety (3)[7]	1	2	II/III	ANTAGONISTIC PAIRING
11a	Moral support & fellowship (1)[2]	1	0	II	UNIQUE RESPONSE
11b	Family activity (1)[2]	1	0	II	UNIQUE RESPONSE
11c	People watching (1)[2]	1	0	IV	UNIQUE RESPONSE
11d	Mental strategy (1)[2]	1	0	IV	UNIQUE RESPONSE
11e	Easy to learn (1)[2]	1	0	I	UNIQUE RESPONSE
12a	Spontaneity (1)[2]	0	1	II	UNIQUE RESPONSE
12b	Landscape nostalgia (1)[2]	0	1	II	UNIQUE RESPONSE

Question 3: Why do you play this course?, targets the theme “attraction to a course”, that is, what course attributes influence respondents to patronize a specific site to play disc golf. Perhaps the distinct advantage of being at the place which interview subjects were evaluating helped them to provide the rich array of responses coded.

It was difficult to distinguish from the transcribed interviews if certain reasons were valued more highly than others. The process of arriving at intersubjective categories involved (1) raw tallying of categories using the specific wording of the respondents (2) interpretation and clarification aided by participant observation notes (3) referencing the common benefits of disc golf, and (4) combining categories with the same or similar meanings. It should be noted that some respondents offered more reasons than others. In Table 27 an agglomeration of all of the discreet reasons for attraction categories gleaned from interview transcriptions is ranked, first hierarchically, by attractions that were coded from responses at all four typologies (ranked highest), down to those only occurring at one of the typologies. Secondly, the attraction categories are ranked by mode (number of times mentioned by discreet respondents). The “characterization” column in Table 27 begins to provide an analytical measure that can help a designer make inferences about inter-typological similarities and distinctions, related to intersubjective attraction categories, which will be helpful for developing typology specific design guidelines for disc golf courses. The typology specific diagrams that follow Table 27 disregard the rankings in order to provide a clear graphic snapshot of the raw attractions that draw respondents to specific course typologies. Individual course attraction is discussed with each of the four diagrams. The same hierarchy agenda from Table 26 for Q2 is utilized in Table 27 for Q3, except that the coded categories were not limited by number or primary/secondary differentiation.

Table 27. Overall course patron motivation rankings, Q3: *Why do you play this course?*

RANK	ATTRACTION CATEGORY (MODE)	TYP(S)	CHARACTERIZATION
1	Close (14)	I/II/III/IV	UNIVERSALITY
2	Landscape variety (12)	I/II/III/IV	UNIVERSALITY
3a	Elevation (7)	IV/III/II	NEW/CENTER BIAS
3b	Landscape nostalgia (7)	IV/III/I	OLD/CENTER BIAS
3c	Scenery/views(7)	IV/III/II	NEW/CENTER BIAS
4	Good people (6)	I/II/IV	NEW/EDGE BIAS
5	Wooded/(oak trees) (5)	I/IV	ANTAGONISTIC PAIRING
6	Secluded (4)	IV/II	NEW COURSES
7a	Community activism (3)	IV/II	NEW COURSES
7b	Wildlife (3)	IV/II	NEW COURSES
7c	Social spontaneity (3)	IV/III	CENTER COURSES
7d	Technical course (3)	I/II	EDGE COURSES
8	Player diversity (6)	I	COURSE SPECIFIC
9	2 Courses (5)	III	COURSE SPECIFIC
10a	New layout (4)	IV	COURSE SPECIFIC
10b	Grassy & open (4)	III	COURSE SPECIFIC
11a	Short & long tees (2)	IV	COURSE SPECIFIC
11b	Figure 8 (2)	I	COURSE SPECIFIC
11c	Shade (2)	I	COURSE SPECIFIC
12a	Competitive energy (1)	IV	UNIQUE RESPONSE
12b	Youtube inspiration (1)	III	UNIQUE RESPONSE
12c	Out-of-bounds-challenge (1)	III	UNIQUE RESPONSE
12d	Opportunistic visit (1)	III	UNIQUE RESPONSE
12e	Outdoors (1)	II	UNIQUE RESPONSE
12f	Family friendly (1)	II	UNIQUE RESPONSE
12g	Like a nature hike (1)	II	UNIQUE RESPONSE
12h	Lack of crowds (1)	II	UNIQUE RESPONSE
12i	Weeklies (1)	I	UNIQUE RESPONSE
12j	Habit (1)	I	UNIQUE RESPONSE
12k	Changing pin-positions (1)	I	UNIQUE RESPONSE

Although the same number of rankings happened to occur in both Tables 26 and 27 (12), only 18 discreet categories were coded for Table 26, while there were 30 discreet categories coded for Table 27. While there was some overlap in the naming and definitions of attraction categories, Q3 responses were less general and more site specific. Relating Table 27 to the biophysical site evaluations above is of increased value, whereas, relating Table 26, which summarized more general attractions to disc golf, to the demographic results, has more value. As noted earlier, Manning (1986) found that site specific preferences of recreation seekers, not demographics, more strongly defines how a visitor views a recreational resource.

At **Oak Grove**, there were thirteen coded categories and thirty individual responses for Q3, attraction to play disc golf there. The smallest circle (or disc, if you will), furthest to the right (Figure 49) represents the category with the most occurrences for each typology. “Player diversity” ranked only eighth in the overall course attraction table (Table 27), but first at Oak Grove, the only typology where its definition was evident. The category clearly emerged during transcription analysis as more than half of respondents at Oak Grove responded to Q3 in part by describing their appreciation of being able to consistently meet and play against a variety of players, with different styles and from different places. It seems the course's rich tradition and renown as the first course, attracts this diversity. There were five instances where respondents mentioned proximity to the course as an attraction to play there. The category “close” was subsequently coded at all typologies and turned up as the number-one-ranked overall category in Table 27. The categories “Figure 8”, “Shade”, “Weeklies”, “Habit” and “Changing pin position”, were all unique to Oak Grove.

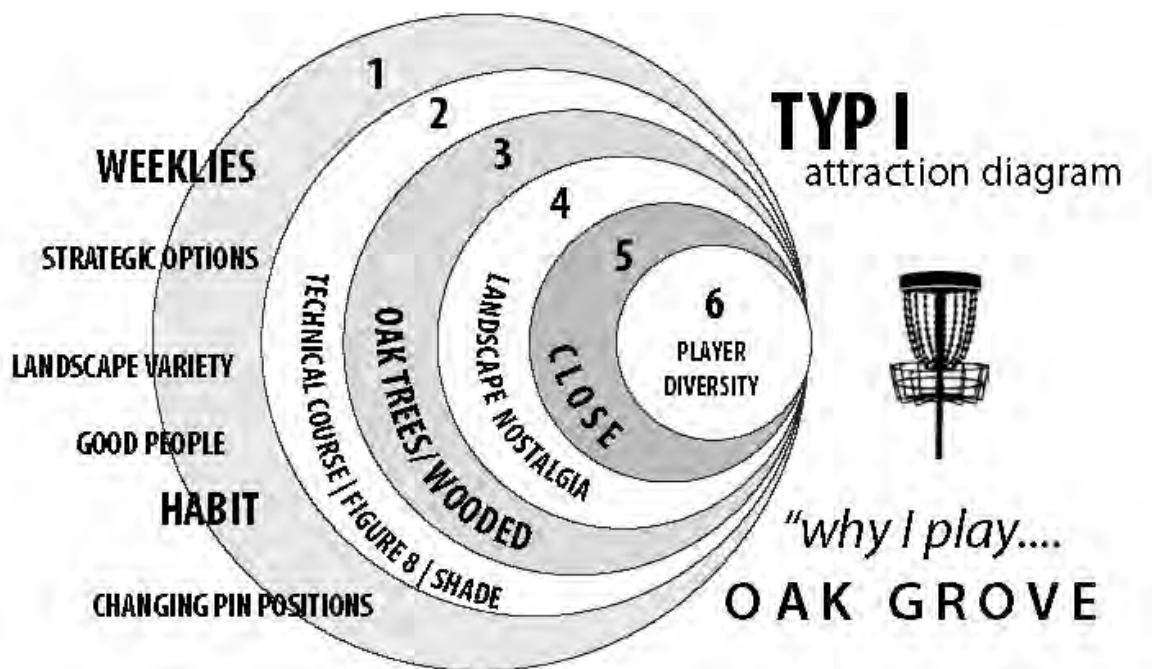


Figure 49. “Why I play Oak Grove” attraction diagram (TYP I)

At **Yucaipa**, there were eleven coded categories and twenty-three individual responses to for Q3, attraction to play disc golf there. “Landscape variety” and “scenery/views” share the spot as top attractions at Yucaipa, having been coded as a response five times each. The category “scenery/views” ranks 3rd in Table 27, but Yucaipa was the only typology where it was coded more than once, whereas “landscape variety” ranks 2nd of all typologies and is more evenly distributed among them. High ratings in these categories seem to relate to the open-space, views and naturalistic setting in a regional park at the urban edge: Yucaipa was also the most coded typology for the category “wildlife” where two respondents mentioned they appreciated the potential to see wild animals, especially raptors, at the course. The categories “outdoors”, “family friendly”, “lack of crowds”, and “like a nature hike” are unique to Yucaipa and reinforce its attractive qualities as a large regional park. Yucaipa shared the category “technical course” only with the other edge typology, Oak Grove, defined as an attraction to a course with difficult shots and angles created by holes that play through dense vegetation. Results suggest edge courses may be more likely to have this quality.

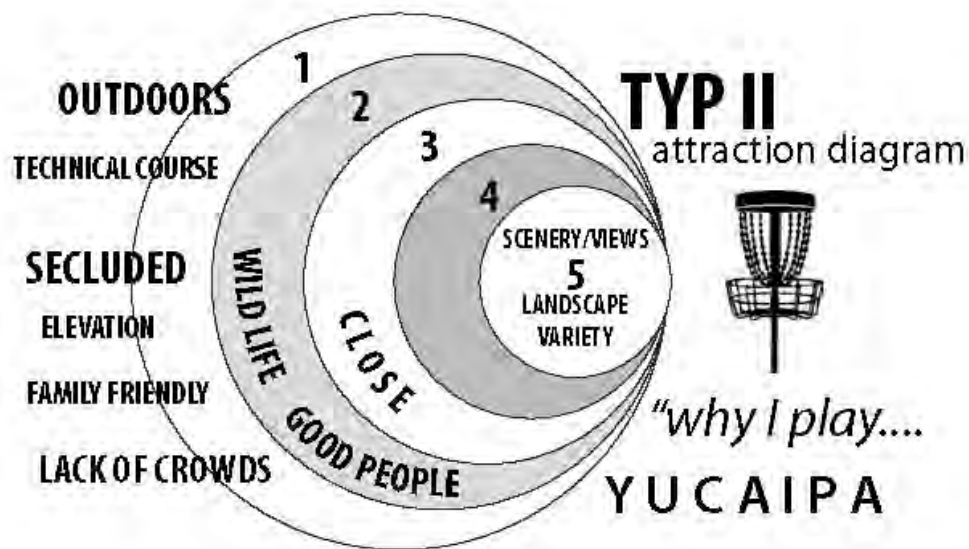


Figure 50. “Why I play Yucaipa” attraction diagram (TYP II)

At **La Mirada**, there were eleven coded categories and twenty-five individual responses to Q3, attraction to play disc golf there. The top category coded to play at La Mirada was “two courses”. Five respondents mentioned that they like to come to the park to play disc golf because there are two 18-hole disc golf courses there. Choice and variety were reasons cited as to why this was an attraction. Physical terrain-related categories dominated as the other top attractions. “Elevation”, “landscape variety”, and “grassy + open”, all received four coded occurrences. Although the category “elevation” could be viewed as a subset of “landscape variety”, it was coded as its own category when the respondent specifically mentioned their appreciation for uphill, downhill, or cross-valley shots as a distinct reason for playing the course. “Grassy + open” was another category unique to La Mirada, and was appreciated most often because the highly maintained turf grass was said to be easy for walking and reduced fatigue, enhancing the ability to play longer (more rounds). One disc golfer interviewed was uniquely coded for the category “opportunistic visit” because he incorporated his round with a visit to a nearby University he was considering attending.

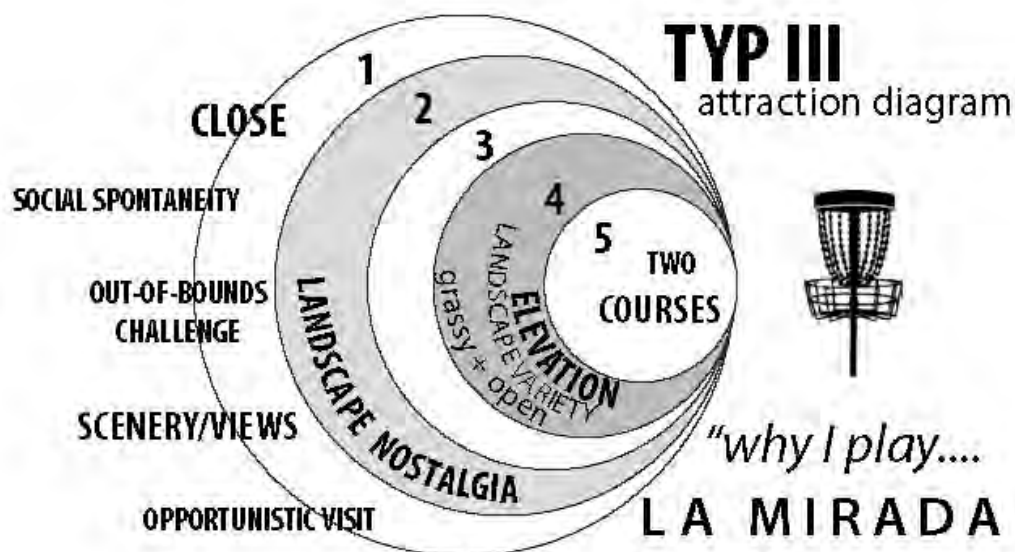


Figure 51. “Why I play La Mirada” attraction diagram (TYP III)

At **Mountain Pride**, there were ten coded categories and twenty-five individual responses to Q3, attraction to play disc golf there. Mountain Pride tied with Oak Grove for the most number of respondents who coded for the category “close” (5). The four respondents coded for the unique category “new layout” were enthusiastic about playing new holes over new terrain whether they had played the old layout or not. Several holes located down in the wooded-wash influenced the coding for the category “secluded” which occurred again as a category only once, at Yucaipa. The category “good people” which ranked 4th in Table 26, was coded most at Mountain Pride. The categories “good people” and “community activism” were coded as distinct, but both seemed to relate to an enthusiasm for being involved with a well liked new course layout, along with “social spontaneity opportunities”. The respondent who coded for “landscape nostalgia” intimated that playing disc golf in the wash reminded him of playing in creeks as a child.

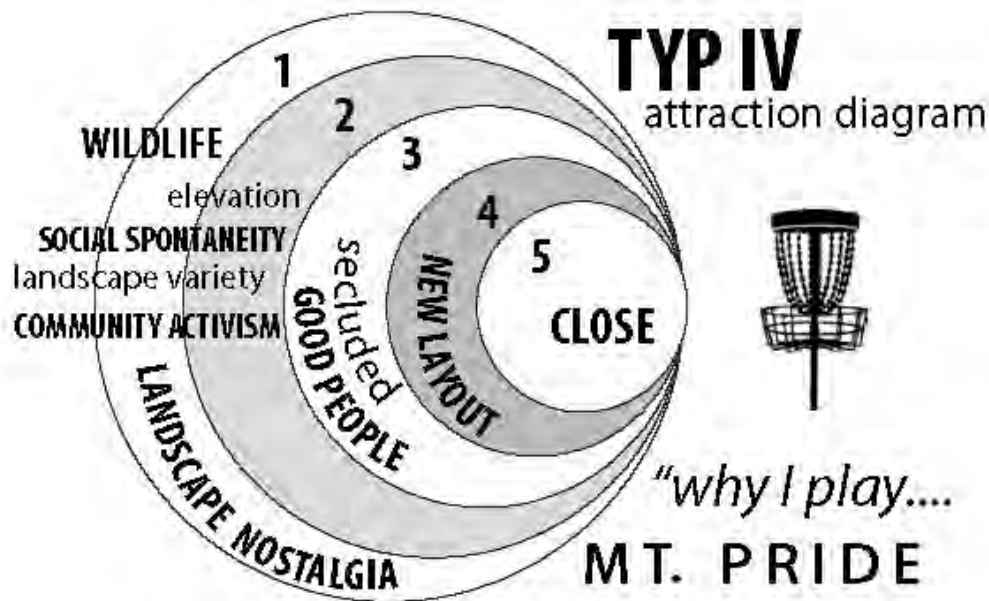


Figure 52. “Why I play Mountain Pride” attraction diagram (TYP IV)

Question 4: Do you spend time in this park doing other activities in addition to disc golf?, targets the theme “activity integration”, that is, what other activities golfers engage in at the parks where they play disc golf, if any, in order to understand the range of relationships/perspectives golfers have about the site as a whole, or if there is a 'package' of site programming that attract people to the park. Transcription analysis revealed that all respondents could be coded into one category each, as they did not offer multiple activities if they mentioned more than disc golf related activity at the park. Results coded from responses to Q4 showed that a majority among all typologies fit the category “just disc golf”, with twenty-seven (61%), although the remaining seventeen responses which were coded for seven categories could be related to the individual site evaluations presented earlier in the chapter for each typology.

Ten respondents at La Mirada stated bluntly that they strictly come to that park to play disc golf, with one coded for the unique category “fishing”, for commenting that on occasion he might do some fishing at the lake, but rarely now, since he began playing disc golf. On the other end of the spectrum, seven respondents at Yucaipa were coded for the category “barbecue/picnic”, which was strongly associated with the 'sub-attractions' of being allowed to 'drink alcohol', 'sitting and enjoying scenery', and 'spending time with family members'. Demographic results at Yucaipa showed the most married respondents (5). Two of those married respondents were coded for the category “playgrounds/swim park”, another family oriented attraction to the Yucaipa course for golfers with families. Participant observation revealed that married and single respondents commingled and socialized freely at barbecue gatherings located in shaded picnic areas around the course extents.

At Oak Grove, eight respondents stated their only activity in the park was related to disc

golf. One respondent was coded for “bike through” as another activity that he participated in at the park. Two respondents were coded for “socialize”, a category distinct from “barbecue/picnic” because there was no mention of food being involved. These people emphasized that the parking lot and the areas near hole-1 and hole-10 were common areas to gather, to meet and talk with other disc golfers, sometimes for extended periods of time. This category seems to be strongly related to the figure-8 course design which clearly splits the course into a front and back-nine, making breaks between short rounds convenient near disc golfers' parked vehicles.

At Mountain Pride, seven respondents stated their only activity in the park and adjacent wash was related to disc golf. Two respondents were quick to mention that they spend additional time in and around the course making course improvements. Although this activity is directly related to disc golf, it was coded separately as “course maintenance” because participation in this activity presents a different perspective where a mindset that considers other park users/stakeholders is adopted, and participants may be more open to sparking interaction with these parties while engaged in their volunteer work. One respondent was coded with the same category of “socialize” as described at Oak Grove. In contrast to Oak Grove, the respondent explained that while he often participated in socializing between rounds, the locations where this occurred in the park varied widely.

It is interesting to contrast the results and analysis of Q3 between the two regional parks in this study, which both offer several layers of programming: La Mirada and Yucaipa. As a smaller and busier park at an urban-center location, results show that despite having opportunities for other activities, disc golfers were not interested in doing them there, mentioning that in some cases they go to other locations that they favor for the same

activities. Perhaps there are more desirable options in the dense urban region where the two courses at La Mirada are located? Yucaipa Regional Park is located at the urban edge, and is much larger, with less sense of crowding, and longer, more natural views. These conditions, along with the allowance of alcohol, seem to entice disc golfers to plan their days, stay longer and interact with friends/family who do not necessarily play disc golf.

The transcription analysis and coding for Q4 necessarily disregarded a significant amount of superfluous information offered by respondents. The following transcription excerpt is indirectly related to the theme targeted for Q4, but is a good example of stand-alone qualitative data gathered through the process of conducting open-ended semi-structured interviews. Respondent II-B was playing the Yucaipa course for the first time and solely focused on disc golf, but had an enlightening experience during his round that he volunteered in response to Q4 about the compatibility of disc golf with other uses; his encounter with a friendly group of people fishing along the lakeshore adjacent to the course curious about the sport:

Respondent II-B

“...we told 'em a little bit about it, you know – show em the frisbees, and they're you know I might be out here playing next week. Next time they come out here instead of fishing they might be out on the course playing – you just give them a little bit of advice, tell them about the sport”

Question 5: Do you play other courses?, targets the theme of “travel motivation”, that is, what other courses are played by respondents interviewed at each typology and what aspects of those courses make a trip worthwhile. The following tables list all of the courses mentioned by respondents with notes on both positive and negative attributes ascribed to the other courses they played in the region. All except the “Mile High” course in Wrightwood would fit into one of the four urban typologies identified in this study. The number of times a course was mentioned at each typology is indicated by hash-marks in the second column of each table, with the sum total below.

An almost universal reluctance to travel too far and/or too often was revealed through the process of developing these tables. At the same time it was revealed that many were perfectly willing to play mediocre courses simply to get some variety closer to home, suggesting that there may be a high demand for concentrations of more dynamic courses. The 9-hole courses were only reported to be patronized when they were 'close to home'. While a range of attributes were mentioned, varied terrain, well-maintained courses, and natural settings were recurring desirable themes. Conflicts with other park or facility users was most often cited as a negative attribute of courses they played. Not surprisingly, the typologies investigated in this study were often mentioned as courses visited from respondents interviewed elsewhere, and are indicated in bold. Respondents listed as few as one other course they played and others offered longer lists of courses without describing why they were patronized. Overall, the forty-four respondents mentioned courses ninety-one times at twenty-three different locations. Courses such as Kit Carson and El Dorado were only popular with patrons of one typology, while Oak Grove, Morley Field and Prado are examples of courses with regional draws, based on the interview content analysis of Q5.

Table 28. Oak Grove **Q5: Do you play other courses?**, travel motivations

Course name	#	City	holes	Positive attributes	Negative attributes
Veteran's Park	IIII II	Sylmar, CA	18	More elevation, pro-shop well-maintained, meet new people less dusty trees	Costs \$2
Chavez Ridge "Elysian"	IIII	Los Angeles, CA	18	Hilly, wooded	Too far
La Mirada	IIII	La Mirada, CA	36	Grassy course, clean, good signage, wide-open two-courses	None mentioned
Whittier Narrows	III	Whittier, CA	18	Grassy and well maintained	Too many picnickers
Verdugo	III	Tujunga, CA	18	Ball golfers are nice: let you 'play through', well maintained	Doesn't feel like you are supposed to be there
Huntington Beach	I	Huntington Beach, CA	18	Grassy, change of scenery	None mentioned
Yucaipa	I	Yucaipa, CA	18	None mentioned	Too far
DeBell (par 3 ball golf)	I	Burbank, CA	9	None mentioned	Get stuck behind slow ball golfers
8	24				

Table 29. Yucaipa **Q5: Do you play other courses?**, travel motivations

Course name	#	City	holes	Positive attributes	Negative attributes
Ford Park	IIII	Redlands, CA	9	Close to home, practice course, fun 'safari' course weeklies	Short holes, park users in the way
Prado	III	Chino, CA	18	Nice park and lake	Too far, not much challenge
Glen Helen	III	San Bernardino	18	Change of scenery	Too wide open
Oak Grove	II	Pasadena, CA	20	Oak woodland, tradition/history	Too far too crowded
Sky High	I	Wrightwood, CA	27	Cool in the summer, 27-holes: make a day of it, well-maintained	None mentioned
La Mirada	I	La Mirada, CA	36	None mentioned	Too far too crowded
Morley Field (Balboa Park)	I	San Diego, CA	18	Convenience: visit family	Too crowded
Mountain Pride	I	Murrieta, CA	18	Good hill and valley shots, technical	None mentioned
Verdugo	I	Tujunga, CA	18	None mentioned	None mentioned
Doris Davies	I	Victorville, CA	9	Close to home, nice park	None mentioned
Montiel	I	San Marcos, CA	9	None mentioned	None mentioned
11	20				

Table 30. La Mirada **Q5: Do you play other courses?**, travel motivations

Course name	#	City	holes	Positive attributes	Negative attributes
Huntington Beach	IIII	Huntington Beach, CA	18	<i>Pro-shop onsite, chance to see pros, history/tradition, well-maintained Close</i>	<i>\$2 to play, but worth it</i>
El Dorado	IIII	Long Beach, CA	18	<i>Tunnel shots through trees, clustered trees, Monday weekly flat = fast rounds</i>	<i>Park users unaware of disc golfers</i>
Veteran's Park	IIII	Sylmar, CA	18	<i>Steve Rico (pro) is a local: chance to play with him pro shop onsite</i>	<i>Too "small", don't like layout dirty, dusty</i>
Oak Grove	III	Pasadena, CA	20	<i>Tradition: 1st course, "shot one of my best rounds there"</i>	<i>Too technical, too far</i>
Yucaipa	II	Yucaipa, CA	18	<i>Good use of elevation & open shots, change of seasons</i>	<i>Strictly a "right hand" course</i>
Chavez Ridge "Elysian"	II	Los Angeles, CA	18	<i>Elevation challenge, technical challenge (trees) technical course, views</i>	<i>Dirty, dusty</i>
Twila Reid	II	Anaheim, CA	9	<i>Close to home</i>	<i>None mentioned</i>
Glen Helen	II	San Bernardino	18	<i>Wide-open, change of scenery</i>	<i>None mentioned</i>
Verdugo Hills	I	Tujunga, CA	18	<i>(on a par-3 ball golf course) greens are O.B.</i>	<i>None mentioned</i>
Prado	I	Chino, CA	18	<i>Close to home, course changes with seasons (leaves): changes shots</i>	<i>None mentioned</i>
Morley Field (Balboa Park)	I	San Diego, CA	18	<i>Technical, accuracy, hills, woodsy corridors</i>	<i>Hard to locate pin positions – too many/changing pin positions – crowded – have to pay</i>
Liberty Park	I	Cerritos, CA	9	<i>Alternate layouts, close tournaments Tuesday weekly</i>	<i>Only 9-holes, holes are short, not many hazards</i>
Whittier Narrows	I	Whittier, CA	18	<i>Grassy and well maintained</i>	<i>None mentioned</i>

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Table 31. Mountain Pride **Q5: Do you play other courses?**, course travel motivations

Course name	#	City	holes	Positive attributes	Negative attributes
Kit Carson	III	Escondido, CA	18	Mixture of "rustic" and "open and parky" close to home nice walk changing views	None mentioned
La Mirada	III	La Mirada, CA	36	2-courses worth traveling for the variety, exploring	People in park not aware of disc golfers
Prado	II	Chino, CA	18	Nice lake, large trees close to home	Have to pay
Acacia	II	Murrieta, CA	9	Variety, close to home mix-it-up	Only 9-holes
Yucaipa	II	Yucaipa, CA	18	Good use of elevation change beautiful setting	Have to pay long drive
Morley Field	II	San Diego, CA	18	Busy, people watching nice trees, rolling hills	Too crowded
River Walk	I	Corona	7	Close to home	Only 7-holes, short holes
Oak Grove	I	Pasadena, CA	20	worth traveling for the variety, exploring	None mentioned

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TOP-TEN MOST REGIONALLY ATTRACTIVE COURSES

- 1.....La Mirada
- 2.....Veteran's Park
- 3.....Oak Grove
- 4.....Huntington Beach
- 5.....Prado
- 6.....Chavez Ridge
- 7.....Verdugo Hills
- 8.....Yucaipa
- 9.....Glen Helen
- 10Morley Field

(based on Q5 content analysis & hierarchal ranking agenda)

Question 6: Do you ever change or modify the rules?, targets the theme of “playful participation”, that is, to what extent is the elusive notion of 'play' involved with the interview respondents' attraction to disc golf and can designers improve course play experiences by understanding what forms it may take. Although interviews and content analysis has revealed a wealth of information about why and where people play disc golf, designers cannot anticipate all of the evolving motivations and preferences over time. The understanding of play and rule-making may help bridge this gap.

Pieper (1952) believed participation in leisure helps us take into account how we arrived at our station in life in order to envision what we can become. Huizinga (1938) was convinced that play as a leisure form strikes a balance between frivolity and seriousness such that participation in play activities allows us to perceive ordinary surroundings in a different light, and feel empowered in a predominately deterministic world. And Csikszentmihalyi (1990) argues that to experience flow, we need to consciously organize our actions and choices, like a story constantly unfolding. To what extent do commonly accepted rules of disc golf provide this structure and to what extent did respondents demonstrate a prerogative to adjust or create rules to organize their relationship as a group to the activity of disc golf? Are rules in disc golf malleable? And how important is the site or typological context to the construction of formal or informal rules in disc golf?

During interviews, following up with a prompt was very important for Q6. As anticipated, many respondents would take on a mild to sharp defensive tone, making clear that they did not change or modify the rules. But, when followed up with the prompt **“Well, do you ever make up your own games or change the course routing?”**, respondents frequently offered a range of answers. A lot of terminology came out in the analysis. Words shown in

ALL-CAPS in this section can be referenced in **Appendix D: Disc golf abridged glossary of terms**, which also contains more general disc golf terminology.

The answers that were given could be categorized into two types (N) rules or games devised to encourage newcomers or less skilled players to enjoy their experience more by 'leveling the playing field', and (E) rules or games devised to make the play more engaging, challenging and complex among friends or groups of experienced disc golfers who play together often. The first type is usually initiated by the more experienced players who explain rules beforehand, offer rule modifications as situations arise (MULLIGANS), or simply overlook rules in order to encourage new players to enjoy a more fluid, unimpeded experience. The second type of game or rule modification is either already tacitly understood or develops on-the-spot through a consensus process within a group.

Eighteen of the forty-four respondents were clear, even after being prompted, that they did not modify the rules or make up games. Four of those players mentioned that they are interested in competitive play and therefore always follow all procedures and rules. In Table 32 are summaries of the remaining twenty-six respondents who described a game or rule modification in which they partake, listed by respondent code (TYP I,II, III or IV – A to K), which relates to the interview transcriptions in Appendix E), a letter code which relates to (N) or (E) as defined above, and a short description or excerpt.

The flow channel diagram (Figure 18, p. 53), patterned after Csikszentmihalyi's (1990) research on flow activities which showed that a delicate balance of challenge, complexity, fascination and organization is required to keep people engaged, relates directly to the games and rules described in Table 32. All are examples of strategies akin to those employed by children in play (Sennet 1977) to maximize and sustain participation, either by leveling

the playing field to ameliorate anxiety, or by increasing challenges to combat boredom.

Table 32. **Q6 Do you ever change or modify the rules?**, playful participation strategies by typology

Respondent code	N/E	Game/Rule Description(s)
I-A	E	(1) SAFARI: a version of disc golf where tee areas and/or targets not intended by the original course layout are chosen by participants, either pre-determined or “on the spot” – In the case the respondent described a game played for money where competitors take turns “calling” the next hole. (2) WOLF: a 'skins' game of five players who take turns 'calling' holes, usually, if not always played for money
I-C	N/E	one MULLIGAN allowed every 9-holes
I-D	N	(1) HANDICAPS or STROKES assigned to weaker or stronger players to balance the play (2) when playing doubles: pairing weakest player with strongest player for balance
I-E	E	(1) TWO-DISC-CHALLENGE: can only use two (pre-determined) discs for the whole round (2) CTP: game where only one throw is taken on each hole from the tee – player who measures closest-to-pin (target), wins the hole
I-H	E	(1) WOLF (2) SAFARI
I-J	N/E	(1) playing for lunch (2) making up MANDOS
II-B	N	described a form of HANDICAP where lesser players 'make' pros putt or drive left-handed
II-C	N/E	SAFARI
II-G	N	mentioned a form of HANDICAP where lesser player is given a higher PAR on every hole
II-J	E	by himself (1) play 2 STROKES for every LIE (2) sometimes makes a rule to himself that he will start keeping score on a certain hole, in the middle of a course
III-B	N/E	SAFARI: makes up holes on short or boring courses with friends to add interest
III-C	E	SAFARI: described golfers as a group who regularly play know alternate course routes
III-E	N/E	Card game: players draw cards that require them to play under particular conditions such as left-handed, or eyes-closed, for certain holes, or whole rounds
III-F	E	PLAY WHERE IT LIES: described a style of play with his peers where discs landing in deep water or high in tree are not O.B. – players stand in water or climb trees, throw from the LIE
III-G	N	BEST DISC: a doubles game where both teammates throw and choose the better LIE from which to play – less punishment for bad shots – involves strategy
III-H	N/E	Card game: called 'ripped revenge' made by INNOVA (may be same game described by III-E), conditions mentioned were being required to use a disc from someone else's bag, can't talk, or player gets a STROKE, and must DRIVE with a PUTTER or PUTT with a DRIVER
III-I	E	(1) O.B.: explained how his friends make the rules more strict/challenging by designating all narrow concrete swales on the course as out-of-bounds, which costs player a STROKE (2) WOLF
III-J	N	described reaching an agreement occasionally to play out two discs on one hole (two STROKES for each LIE), when it is an especially fun hole
IV-B	N	keeps 'pointers' down to a minimum for new players, let's them play and experiment on their own without worrying about rules or technique
IV-C	N	Makes up doubles games, like 'variations' on BEST DISC, so new players enjoy game more

Table 32. continued

Respondent code	N/E	Game/Rule Description(s) Excerpt
IV-E	N	DROT: occasionally a disc will land and rest on top of a POLE-HOLE (BASKET) – this respondent reported that his peers count this as 'good' as an exception, despite following all other standard rules
IV-F	N/E	SAFARI
IV-H	E	BAG-TAG: described his involvement in developing rules for challenging other players during 'casual' rounds in a local club through a system of ranking that uses tags
IV-I	N	Level the playing field by throwing left handed or changing the PAR (HANDICAP)
IV-J	E	SAFARI (tie break): when at the end of a round, there is a tie score, respondent described how his peers break the tie (playoff) by making up a hole not on the established course
IV-K	N/E	NATURALS: described a modified game where each player is allowed one MULLIGAN per hole, but if the player chooses not to use a MULLIGAN, he/she records a NATURAL – if both players BIRDIE a hole, but one uses a MULLIGAN to do it, the one who didn't have to use the MULLIGAN 'goes up a natural' – relative NATURALS are tracked throughout the round and whoever has more at the end, in the event of a tie score, wins the round

Respondents not represented in Table 32 may favor the play form AGON, described by Callois (1961) as pure competition. The push-and-pull of 'social play practices', as described by Gordon & Esbjorn-Hargens (2007), is strongly associated with AGON. Strict rules are critical to this form of play by emphasizing pure skill and ability that places participants in a clear hierarchy. Respondent III-I changed the rules in order to make the game more challenging than the accepted standard. Presumably for this individual and his peers the heightening of standards serves to focus his fascination of the game, in the 'eternal now' (Pieper 1952). Several respondents highlighted in Table 32 showed more interest in raising the complexity of the game rather than focusing on acute or particular challenges. The play form MIMESIS, as described by Callois (1961) emphasizes mimicry and role playing, and more likely appeals to those seeking to engage their imaginations (Gordon & Esbjorn-Hargens 2007). Respondent IV-K in Table 32 appears to match the 'experiential play practices' (Gordon & Esbjorn-Hargens 2007) of MIMESIS. Several permutations of the SAFARI, WOLF and 'skins'

games described above combine elements of AGON and MIMESIS where the competitive structure of the game allows for improvised, strategic decision-making or posturing. Forms of SAFARI allow players to take turns 'calling' holes they believe will favor their game plan.

The play form ALEA (Caillois 1961), refers to games of chance where fate and identity (Sutton-Smith 2001) are intertwined with cultural practices (Gordon & Esbjorn-Hargens 2007). The card games mentioned by respondents III-E and III-H, as well as the PLAY IT WHERE IT LIES rule modification described by respondent III-F, are good examples of disc golfers who are stimulated by injecting chance into the flow of play, in part because it helps to structure a narrative or story that explains why things turned out as they did. The inventory and analysis of the biophysical and sociocultural elements of the four course typologies targeted for this study has revealed that disc golf in urban areas is variable, and malleable to different settings. Positive social settings and an overall expressed desire for variation in course play experiences suggests that courses can be designed better by observing cultural modifications to play practices. How rules are modified by participants are signals about disc golfer motivations and preferences that may not be expressed overtly, or rationally.

Respondents at Oak Grove, typology I, OLD/URBAN EDGE, revealed an emphasis on increasing challenge and complexity for experienced players through the games they play and the rules they modify. Social hierarchy and intense cultural interaction have been shown to be highly valued there, which seems to also be intensified by the prevalence of gambling (mostly low stakes) on disc golf.

At Yucaipa, typology II, NEW/URBAN EDGE, there were the least number of respondents who reported engaging in rule changing or game creation. Those who did mention modifications more often spoke of strategies to level the playing field for newer or less

skilled players to increase participation, which seem consistent with being a newer course, where maximizing participation by all may be a collective priority. The highly valued natural, uncrowded setting at Yucaipa, may also shift the play form there away from AGON towards a more experiential form of play that emphasizes imagination and internal exploration as illustrated by the account offered by respondent II-J who seemed content finding a dynamic disc golf play experience by himself.

Analysis of Q6 responses at La Mirada, typology III, OLD/URBAN CENTER, resulted in the most diverse examples of rule modification and game invention of the four typologies. The responses also showed an even mix of modifications that sought to level the playing field and increase challenge. As the course setting having the most variation in elevation as well as the most uniformly and open ground plane (turf dominance), perhaps La Mirada's landscape character is conducive to creative play? Furthermore, being located in the middle of sprawling urban populations in all directions may explain the diversity of play forms discovered at La Mirada from analysis of Q6 as a function of the diversity of disc golfers who meet and interact there from a wide geographical range.

Finally, Mountain Pride, typology IV, NEW/URBAN CENTER, results from Q6 suggested that an enthusiasm to share a new course layout with others and a centralized location accessible to several urban job centers influenced responses. An interesting mix of competitive fervor with a desire to maximize participation and level the playing field can be seen in the game modification examples given. Site visits and Facebook group discussions reveal strong attendance at WEEKLIES and a high level of player skill which might be expected to be associated with an AGONISTIC play form, but significant elements of MIMESIS and ALEA in respondents were revealed in analysis of both Q3 and Q6. Will the desire to level the playing

field among disc golfers at Mountain Pride wane if competition and skill continue increasing, as the new course becomes more regionally recognized? Or will the nature of the game forms they choose to play continue to place value on the maximization of participation by all levels as the course ages? These are pertinent questions to ask as we prepare to examine the results of Q7, the last of the questions posed to interview respondents.

Question 7: Would you be open to/interested in playing courses designed on unconventional landscapes? Such as: targets the theme of “malleability”, that is, what is the level of willingness to consider, or perception of, urban disc golf course patrons to adapting various non-park or industrial urban settings for disc golf activities. Interview respondents were shown photographs of seven distinct types of settings that fit the description of what Berger (2006) called drosscapes, or wasted, leftover industrial landscapes. One image was shown per page and the respondents reacted to each image in turn, in rapid succession when appropriate. Some respondents offered short affirmative or negative answers as to whether they would be drawn to a course in such a setting, while others saw fit to further expound on the virtues or drawbacks of the settings. The coding agenda for content analysis was to rate responses to each image as (P) positive, (I/M) indifferent or mixed, or (N) negative. Table 33 shows the distribution of all 308 coded responses. The “hash-marks” highlighted in red are responses that are excerpted from the interview transcriptions (Appendix E), and analyzed further for relevance or meaning. Results of the coding process show that reactions to the seven photos overall were 71% POSITIVE about playing disc golf in those settings. Reactions were less than 8% NEGATIVE, while approximately 21% of reactions were coded as INDIFFERENT/MIXED. Despite results

that show an apparently high willingness to entertain the idea of disc golf courses in various kinds of unconventional urban-waste landscapes, there was considerable variation in reactions between the four typologies and the seven images.

The two new course typologies – Yucaipa and Mountain Pride – had the highest POSITIVE response rates to the images. At Yucaipa, only 2.6% of 77 reactions were negative. The highest POSITIVE reaction rate of the seven images was 86% for URBAN WASH, which was the only image that did not code for any NEGATIVE reactions, although six reactions were coded as INDIFFERENT/MIXED (14%). In Table 33, the quadrants shaded dark grey also highlight very high POSITIVE reactions to ABANDONED RAILROAD from respondents at Yucaipa, and FREEWAY from respondents at Mountain Pride. Several respondents volunteered valuable qualitative information prompted by viewing the images beyond their coded reactions about their experiences playing other courses in similar landscapes.

Table 34. **Q7: photo response**, I-C excerpt

Respondent	Image	Excerpt Interview Transcriptions, Appendix E,
I-C	UTILITY CORRIDOR	<i>I've even seen courses like this where the piece of land is very rectangular – And it's like a 9 hole course and you shoot to there and then to there(and so on) – and you just cascade down their property like – and the property is like only 200 feet wide or something like that, so the holes aren't very long, you're shooting straight at em, but it's more like a 9 hole that zigzags up property like that to utilize more holes in one space – It's a smaller easier course... people who are like getting into the game, it's easier for them to understand.</i>

Respondent I-C was coded for a POSITIVE response to the UTILITY CORRIDOR image and went on to describe the dynamics of a course in a similar context. In the excerpt he alludes to the potential for landscape legibility, efficient use of space and amenability to newer players on courses along utility corridors.

Respondent II-B was coded for a POSITIVE response to the FACTORY OUTSKIRTS image, which received fairly mixed reactions overall. The excerpt shown in Table 35 seems to

suggest that his receptiveness to playing a disc golf course in clear view of industrial factory infrastructure was influenced by a past positive experience at another course:

Table 35. **Q7: photo response**, II-B excerpt

Respondent	Image	Excerpt Interview Transcriptions, Appendix E
II-B	FACTORY OUTSKIRTS	<i>That's the same thing from the San Marcos course, you can see the smoke stacks from the STG&E Plant and all that – it's actually cool to look at, when the sun starts going down and lighting it up and all that, it's just cool to see stuff.</i>

Many respondents were not just tolerant of the idea of playing disc golf in industrial or highly engineered, urban settings, but actually found them aesthetically pleasing. Only 23 of the 308 total reactions to the seven photos were coded as NEGATIVE, and most of those were simple “No's”. Nonetheless, Respondent III-D, a long-time tournament player from La Mirada, qualified his NEGATIVE response to FACTORY OUTSKIRTS, as shown in Table 36:

Table 36. **Q7: photo response**, III-D excerpt

Respondent	Image	Excerpt Interview Transcriptions, Appendix E
III-D	FACTORY OUTSKIRTS	<i>I don't see where it'd be near as enjoyable as other park friendly areas. Just like ball golfers, you know, would a ball golfer want to go play underneath that bridge or something, you know (laughing)....</i>

This preference for a softer, more idyllic, parklike landscape for disc golf, akin to traditional ball golf courses, was also evident in several responses to questions 2 and 3. It is interesting to note that coded responses to Q7 from Oak Grove, typology I, and La Mirada, typology II, showed slightly less receptiveness to playing disc golf in landscapes depicted in the images than Yucaipa, typology II, or Mountain Pride, typology IV. This may suggest that patrons of the older courses, in higher density urban areas, long for a disc golf experience in a more idyllic landscape setting, perhaps to escape a more oppressive urban lifestyle. Do the city dwelling golfers long for a rural ideal, while the suburbanites crave doses of gritty city life?

Respondent IV-B was coded for a POSITIVE response to the FREEWAY image and offered

Table 37. **Q7: photo response**, IV-B excerpt

Respondent	Image	Excerpt Interview Transcriptions, Appendix E
IV-B	FREEWAY -- LEFTOVER LAND	<i>Most definitely, and the more um, open its, the farther away it is from other activities, its, say you pull off the 15 somewhere on a Mountainside, I'd play it. If it was in town, downtown, by a park, and there's a lot of activity, I may not, I'm not, I don't like being enclosed to the point where you're constantly looking out for other people. When I go out to play I wanna kinda like get away from a lot of activity.....</i>

an intriguing perspective on disc golf in large scale, engineered, landscapes (Table 37). He seems to view wasted space around freeways as suitable settings for disc golf because the spaces are likely to be free of distractions from other people. Industrial solitude? While some respondents to Q7 seem enamored with the aesthetics of industrial tinged landscapes, others seem willing to accept them as a reasonable trade-off in order to acquire dedicated space for disc golf, or because they simply crave course variety closer to home.

Table 38. **Q7: photo response**, IV-C excerpt

Respondent	Image	Excerpt Interview Transcriptions, Appendix E
IV-C	ABANDONED FACTORY	<i>Well, Yeah! You could get really creative with that.</i>

The image of an ABANDONED FACTORY was shown to respondents to test the extreme, and did code for the lowest POSITIVE response rate (59%). Nonetheless, a significant amount of enthusiasm was shown for the creative possibilities of designing a disc golf course in or around an old factory, as exemplified by respondent IV-C (Table 39). Responses such as these suggest that disc golfers may value the game because of its opportunities for creative expression. If leisure is engaged in to escape deterministic routine (Pieper 1952), then the demonstrated malleability of disc golf as a play-form based on coded analysis of interview results may also make it especially adaptable to the landscapes presented in images from Q7, which were broadly viewed as reasonable, if not desirable locations to play disc golf.

Discussion

In Chapter 1 the background of disc golf has been discussed in terms of its growth. Although existing data cannot verify actual numbers of regular disc golfers, steadily increasing disc sales (Kennedy 2007, Simons 2012) alongside a heavy uptick in new courses over the past decade (PDGA 2011, DG Coursereview 2013) suggests that participation in this recreational activity is on the rise. Geographical studies performed by West (2012) using Professional Disc Golf Association (PDGA) demographic information have shown that disc golfers are concentrated in urban areas. The semi-structured interviews for this study captured a cross-section of regular (avid) players of urban courses in Southern California by targeting the four distinct course typologies discussed throughout this study. Only 23% of the sample were PDGA members. Discovering the values, beliefs, perceptions and motivations of the disc golfers who patronize these courses most often, regardless of membership, was identified as integral knowledge to plan for future disc golf facilities.

Details of land ownership and liability are beyond the scope of this study but warrant further investigation based on its findings. There may be potential for cooperative agreements between land owners to manage/develop disc golf facilities that cross property lines. In the case of Mountain Pride, typology II, urban center, the City of Murrieta owns both the small residential park and the adjacent urban wash (flood control area). This study showed the course that weaves between the two areas has several benefits. Similar spatial relationships may offer promising opportunities for new park courses to leverage adjacent underutilized land types within the vast urban matrix of Southern California, but the incidence of disparate land owners is inevitable. A regional geographic information system (GIS) study could assess existing inventory of park/dross relationships conducive to disc golf.

This study has endeavored to suggest that the spatial patterns of disc golf are powerfully correlated with its attendant cultural patterns. Physical strategies to formalize course design and layout varied considerably between the four typologies studied, which in turn revealed how grass-roots, incremental volunteer efforts, over time, contribute to present day course character and legibility. The new courses studied (1) Yucaipa, typology II, urban edge, and (2) Mountain Pride, typology I, urban center are examples where County Parks & Recreation (San Bernardino) and municipal authorities (City of Murrieta) respectively, have recently endorsed such efforts to activate underutilized space for recreation. The Trust for Public Land (2011) has identified Los Angeles as one of the nation's most park-poor major urban regions, while Berger (2006) has identified the same region as dross rich. The impetus for this study was to discover if disc golf, as a lifestyle sport, has a unique ability to adapt to underutilized landscapes. The process of surveying 85 Southern California disc golf courses using crowd-sourced (Brabham 2012) course descriptions (DG CourseReview 2013) as part of site selection, showed that course layouts are frequently inscribed into the underutilized fringes of public parks and privately owned recreation sites (Tables 4 to 7), such as church land.

Content analysis of transcribed interviews ranked respondent attraction to disc golf by the following coded and ranked categories: (1) "good people; camaraderie", (2) "flight of the disc" and (3) "challenge; self-improvement", followed closely by (4) "challenge; competition with others". If the two "challenge" categories were to be combined into one, the merger would edge out "Good people; camaraderie" for the number one rank. But the distinction is important. The equal weight across the sample placed on both types of "challenge" speaks to the malleable balance of modern/postmodern (Rojek 1995) play forms (Callois 1961) that define disc golf as a unique lifestyle sport (Wheaton 2000, 2004). Participant self-

determination and community activism were recurring themes that surfaced in the interviews that suggest leisure (Pieper 1952) and play (Huizinga 1938, Sennet 1977), as discussed in the Chapter 2: Literature Review, are indeed the basis of disc golf culture.

This study further revealed that biophysical considerations were the most important attractions to the course typologies studied by way of content analysis on Question 3: **Why do you play this course?** Of the twelve ranked categories coded for this question, only (1) “close” and (2) “landscape variety”, were universally mentioned as attractions at all four typologies. Perhaps the most important finding of this study rests on the conclusion that Southern California disc golfers are reluctant to travel to courses but crave variety. This conclusion is reinforced by analysis of responses to Question 5: **Do you play other courses?**, and a high value placed on “affordability”, based on Question 2 responses. A willingness to play courses of lesser regard, but closer to home, in order to inject more variety into a localized disc golf experience, suggests that a geographic concentration of better designed courses of varying landscape settings is desirable. Such a strategy promises increased accessibility of disc golf for avid and new players alike, while addressing the preference for landscape variety. On the other hand, this strategy presents the challenge of finding the space needed – 9 to 40+ acres (Disc Golf Course Designer Group 2012), to develop a course, without conflicting with existing recreational, institutional, residential or commercial uses.

The categories “elevation”, “landscape nostalgia” and “scenery/views” tied as the 3rd ranked attractions among the four course typologies, supporting research performed by Kaplan, Kaplan and Ryan (1998) about human/natural landscape preferences. Qualitative data that emerged from the interviews in response to Question 7 involved responding to seven images of industrial drosscape settings in terms of the desirability to play disc golf in each

respective 'scenario'. Transcript analysis showed that the overwhelming willingness of disc golfers in this study to consider course development on sites dominated by obsolete or underutilized human-engineered environments (dross), was qualified with language that alluded to the same principles of complexity, cohesiveness, mystery and extent described by Kaplan, Kaplan & Ryan (1998). Interview subjects responded most positively to the idea of integrating natural and industrial environments when they volunteered explanations about how the course scenarios suggested by the photographs might be optimized for their own preferences. This superfluous, yet informative content analysis agrees with the overall desirability of "variety" in the landscape coded among respondents at all course typologies. Perhaps one unique aspect of disc golf as a lifestyle sport, coded as the highly ranked attraction category "flight of disc", helps disc golfers visualize and appreciate diverse landscapes through their self-described vicarious fascination with flight? Continued technological advances in golf disc designs (Simons 2012), along with landscape variety within and between courses, together promise the challenge and skill variables discussed by Csikszentmihalyi (1990) to stay in the flow-channel of peak experience.

Results of this study further showed that disc golfers interviewed at the urban-center typologies placed more value on an idyllic, scenic experience, while respondents from the urban-edge typologies exhibited more appreciation of the potential for drosscape in their disc golf experiences through responses to question 7. Pieper (1952) suggested that leisure serves a human need to have experiences other than, and away from, the pre-determined routines of modern life in order to imagine a different way forward, while Huizinga (1938) and subsequent scholars of genuine play activities embrace its sociological capacity to maximize participation and enjoyment. A "wooded" or "nature experience", "seclusion" and

“wildlife”, were mentioned as attractions, predominantly at the new course typologies. This result may suggest that care should be taken to manage urban ecological resources (Whiston-Spirn 1984) of new courses to preserve these valued attractions for the future. The playful and often biophilic (Wilson 1984) disc golf culture discovered in this thesis may be a suitable platform for such stewardship and activism?

Course specific categories that were coded more than once such as “player diversity”, “new layout”, “grassy & open”, “figure 8”, and “short & long tees” (Table 27) are a testament to the unique attractions that each disc golf course may offer. When evaluating potential sites for disc golf courses, identifying typological similarities with these course-specific categories may be especially instructive.

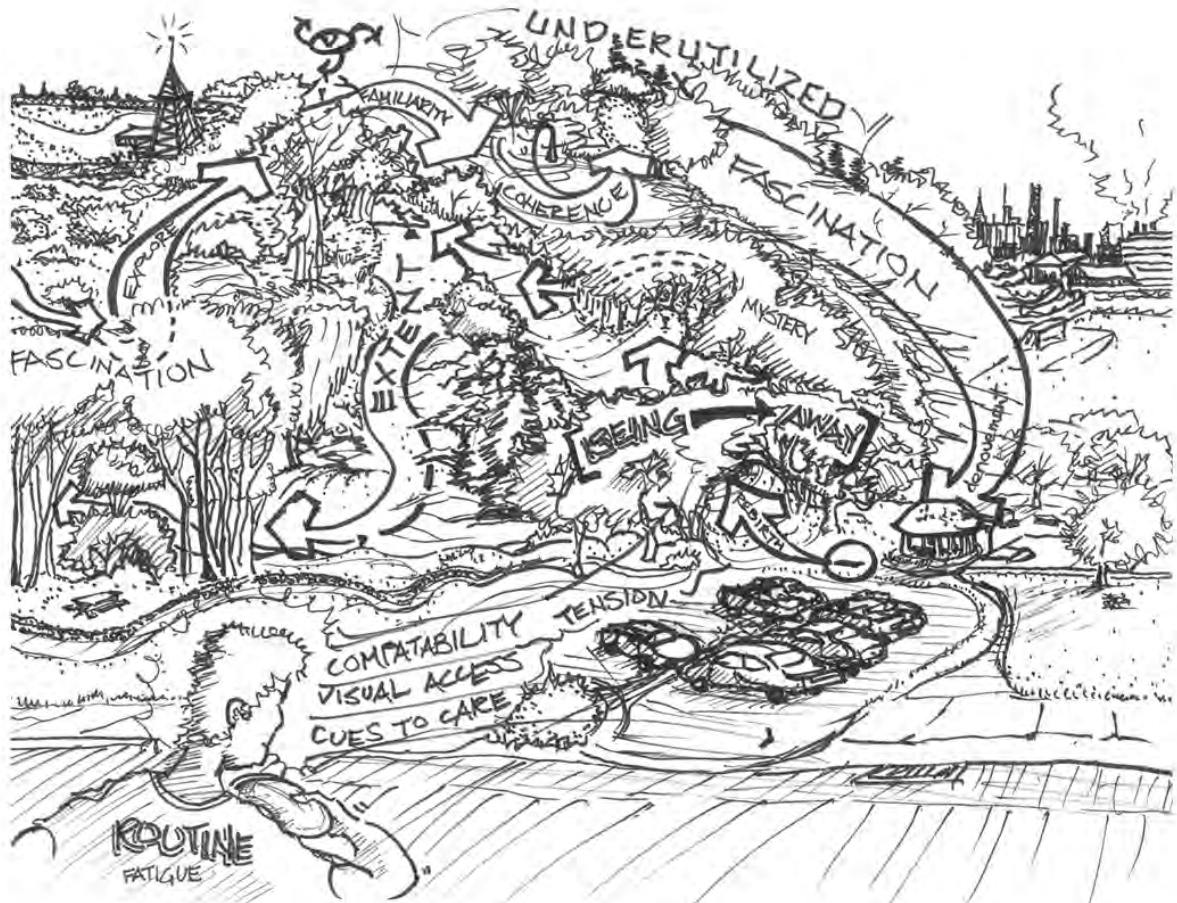


Figure 53. Metaphysical/proto-cultural play-grounds

CHAPTER 5: GUIDELINES AND RECOMMENDATIONS

What can we learn from this culture-centric research on the nature of disc golf course design for Southern California's urban context? Recommendations are based on the findings of this research and presented in the style of a playbook; a metaphor based on the concept of planning to run effective “plays” by maximizing resources and coordinating efforts of players on a sports team, symbolized by “X's” and “O's”. Guidelines are presented conceptually with graphics and explanatory text at a hierarchy of scales from regional to site: **(1)** course distribution, **(2)** spatial landscape character relationships, **(3)** self organizing cultural resources and **(4)** nested examples of site-scale course features.

Lyle (1999) suggested the manner in which humans interact with their environment determines how resources flow in interrelated systems. By starting from a regional perspective on landscape and disc golf course design, then zooming-in to a human scale experience of site, these broad-brush guidelines endeavor to frame a human-ecosystematic whole, based on this study's merger of empirical and theoretical investigation. Further investigations of regional landscape character and relationships, site specific inventories, and targeted qualitative research of disc golf subculture can all serve future course designers to practically focus the broad concepts presented here, on specific contexts.

Regenerative design (Lyle 1999) can only be achieved by understanding and inscribing human lifestyle phenomenon, place by place. The loose graphic style of the Playbook (figure 54) is meant to be “playful” in order to maximize participation by the reader in the potential of the concepts. Just as interview respondents in this study have revealed that the rule structures/conventions in disc golf are a baseline for cultural unity, they are also malleable enough to accept individual expressions of order-making that keep participants in the

flow-channel (Csikszentmihalyi 1990).

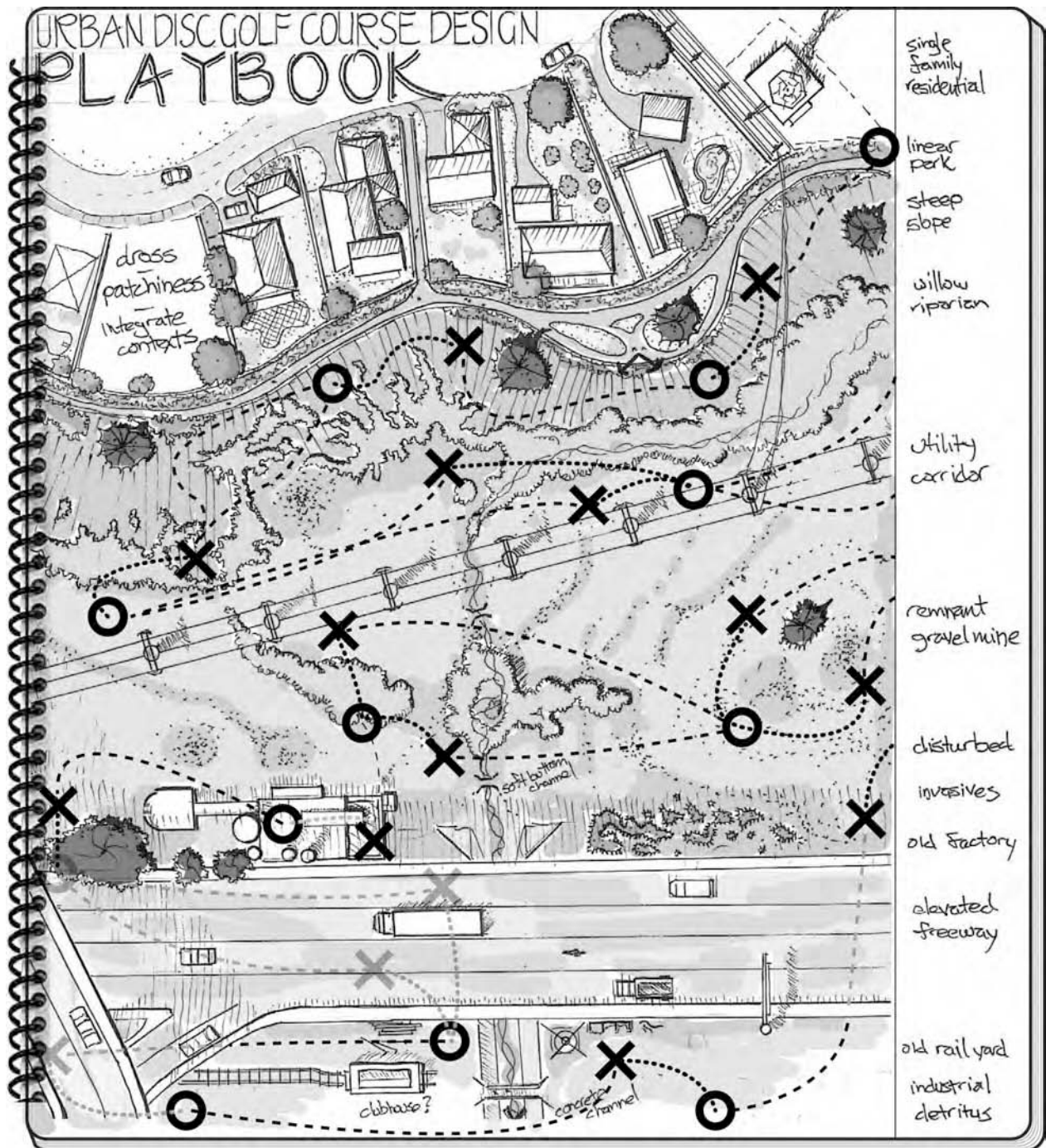


Figure 54. Urban disc golf course design playbook

The results of this study suggested that there is demand for more course variety closer to home for urban Southern California disc golfers. Setting outlier results aside – respondents traveling from outside the region to play a course, average distance traveled from home ranged only from 5.7 miles at Yucaipa to 19.25 miles at La Mirada, among the four typologies studied. Several respondents at Yucaipa – an urban edge course, reported that they would occasionally play a 9-hole course at Ford Park in Redlands for variety and convenience, but overall did not travel often because the 18-hole course at Yucaipa was highly regarded. A concentration of disc golfers at the urban edge is limiting the accessibility to variety compared to La Mirada – at the urban center, which has the additional travel attraction of having two 18-hole courses on site. More courses that offer variety closer to home would encourage urban disc golfers to travel less and perhaps play more often. Results showing that most disc golfers were introduced to the activity by “friends” or “family”, suggests that legible courses (easily understood by newcomers), closer to home, would encourage more people to get involved with disc golf.

Figure 55 graphically represents a strategy to cluster a “variety” of courses (difficulty, number of holes and landscape character) in areas within a 15 mile radius of existing popular courses. Extensive utilization of DG CourseReview (2013) – dgcoursereview.com, for this research has proven the crowd-sourced data from website queries to be an accurate measure of popularity. In addition, course descriptions on the website reveal the common appropriation of underutilized, fringe spaces in public parks. Tables 4 to 7 can be referenced to regionally identify the 85 existing urban courses in Southern California.

Once a “focal course” is identified, a survey of existing public parks and drosscapes within a 15 mile radius can be performed. Parks can be examined to determine if there are portions

COURSE DISTRIBUTION OPTIMIZER

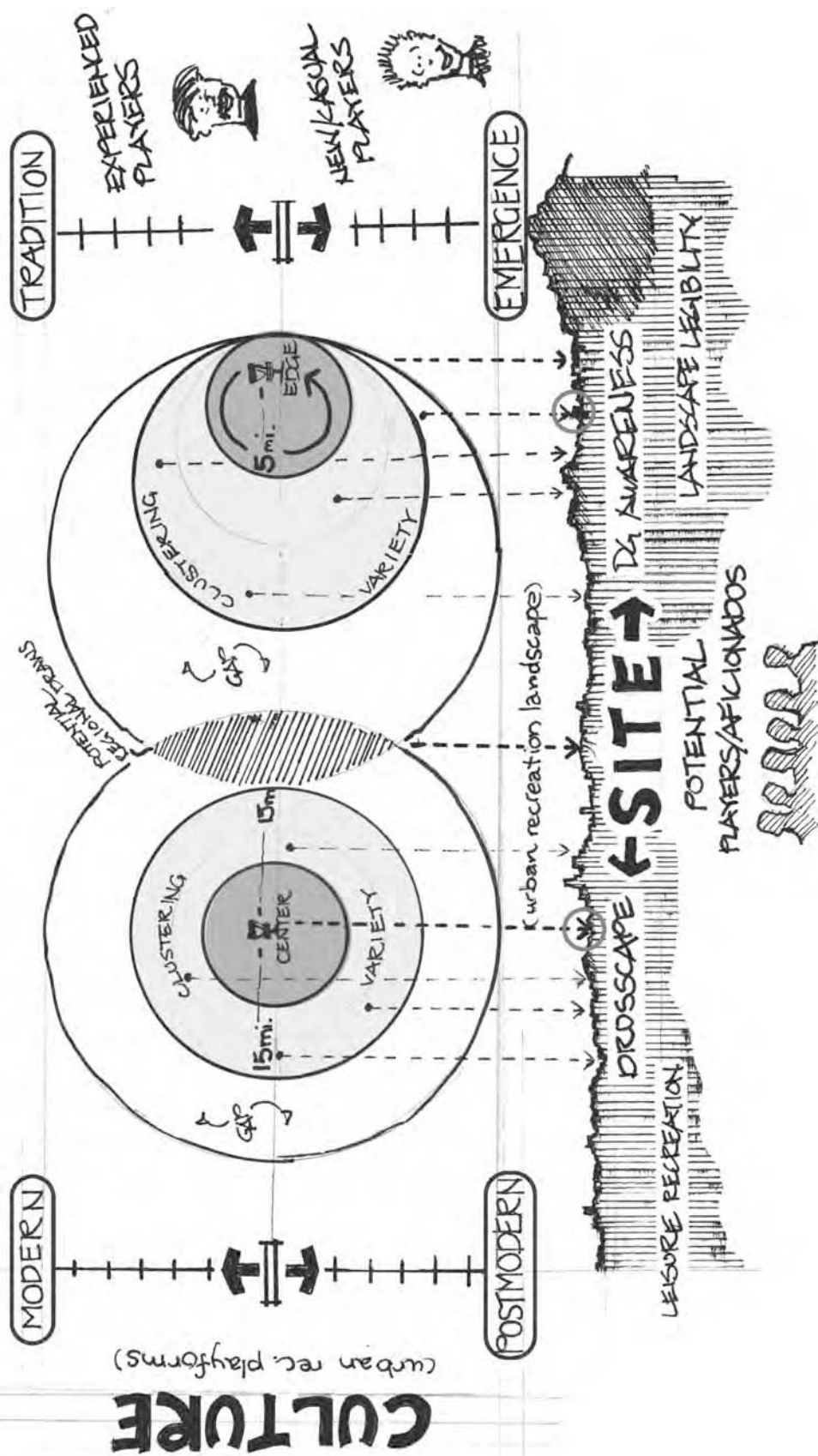


Figure 55. Urban disc golf course distribution optimizer

of land which are not getting use, or are experiencing derelict social activity, and have sufficient space for disc flight corridors, as well as other safety concerns. The most opportunity for new courses in the Los Angeles urban region may be at existing parks that have underutilized corners or edges directly adjacent to drosscape environments. The value of this type of spatial relationship was demonstrated at Mountain Pride, typology IV, in this study in Figure 39. For **distribution optimization** and planning of new courses existing parks generally already offer access (parking) and facilities (restrooms, drinking fountains). Although courses such as La Mirada (an “old” course) have demonstrated the successful establishment of disc golf among other recreational uses, several respondents in this study expressed tolerant frustration with this overlap. On the other hand, the case of Mountain Pride, which removed several holes from a developed park area to realign the majority of the layout in an adjacent wash suggests that utilizing the edges of programmed park areas for a limited number of holes may provide better integration, less conflict, course legibility by other park users and mystery (permission and enticement to explore beyond the conventionally manicured park area).

Participant observation at Yucaipa showed that non-disc golfers enjoy observing the activity from locations such as lakeshore or picnic areas, which are safely out of the course routing pattern, but offer prospect and extent. Park/drosscape spatial relationships may offer the most promising opportunities to cluster a variety of courses closer to where golfers live. Linear greenway corridors and pocket parks may also serve as “jumping-off-points” for courses utilizing adjacent drosscapes, simply by offering accessibility, gateways, gathering nodes, facilities, and a possible site for tee number-one or the final hole. Several respondents in this study reported playing at local 9-hole courses not necessarily to play a round, but to

practice particular shots around/over/through landscape features. Smaller spaces which could accommodate putt-and-approach practice areas could consist of one to six baskets (POLE-HOLES), and offer more layout flexibility to get the most out of a site's unique landscape features. Imagine the creative games and rules that would be conjured at well designed disc golf practice facilities and what designers may learn from it?

The popularity of disc golf continues to increase despite limited mass awareness through the media (Simons 2012). New course development should not only concentrate on clustering around existing popular sites, but should also identify areas with regional gaps in course number and quality. The research for this study shows that Southern Orange County is an area that has the opportunity to establish a new node of disc golf culture in Southern California by creating “regional draw” courses. Two separate respondents from Aliso Viejo (South Orange County City) traveled over 30 miles to play Mountain Pride and La Mirada. Figure 55 shows that where an overlap in 30 mile radii between popular course concentrations may be desirable areas to target the development of new courses as a “regional draw”. Such courses should have at least 18 holes. Twenty-seven hole courses or layouts with two 18-hole courses with different landscape characters, would offer a stronger attraction. Separate 9-hole or even 6-hole beginner/practice courses adjacent to a main course may also do well to encourage new players and attract more family oriented disc golfers to the site. Courses developed to be a “regional draw” would also do well to integrate other passive or active recreational activities on the site. A new process of clustering courses may begin as new urban “regional draw” courses create the local demand. Accessibility by public transit to such sites should be carefully considered.

When disc golf's physical ability to be inscribed into a wide range of landscapes without significant site alterations combines with the cultural flexibility of participants to be engaged in a variety of landscape characters as demonstrated by the findings of this study, the opportunity for new course locations expands. The **spatial landscape character relationships** explored graphically below only skims the surface of possibilities.

Opportunities for new courses entirely within existing public parks is not addressed here because as the most common spatial relationship for Southern California courses (Tables 4-7), there are already existing precedents for courses of various ages, and siting courses among previously programmed recreational activities has more potential for conflicts. The examples shown are based on precedents discussed in this study as well as common urban spatial patterns of dross, or otherwise underutilized landscapes.

Although the examples may resemble a particular site, they are merely conceptual exercises to help course designers identify opportunities. The legal, liability, safety, zoning or community compatibility issues involved with siting courses in these spatial relationships is beyond the scope of this study. The five examples which follow also offer urban spatial scenarios from which to consider the subsequent recommendations and guidelines for **self-organizing** and **site scale design**. The examples and variations thereof are the core components of this "Playbook" because of the importance of the site selection process to successful design. Access, course-routing pattern and gathering nodes are discussed for each relationship. The broad curvy arrows represent course routing (fairways), the dots represent connector paths between holes, the O's represent tee areas and the X's represent targets (POLE HOLES). The broken arrows represent access points and the black star emblems represent gathering and/or informational nodes.

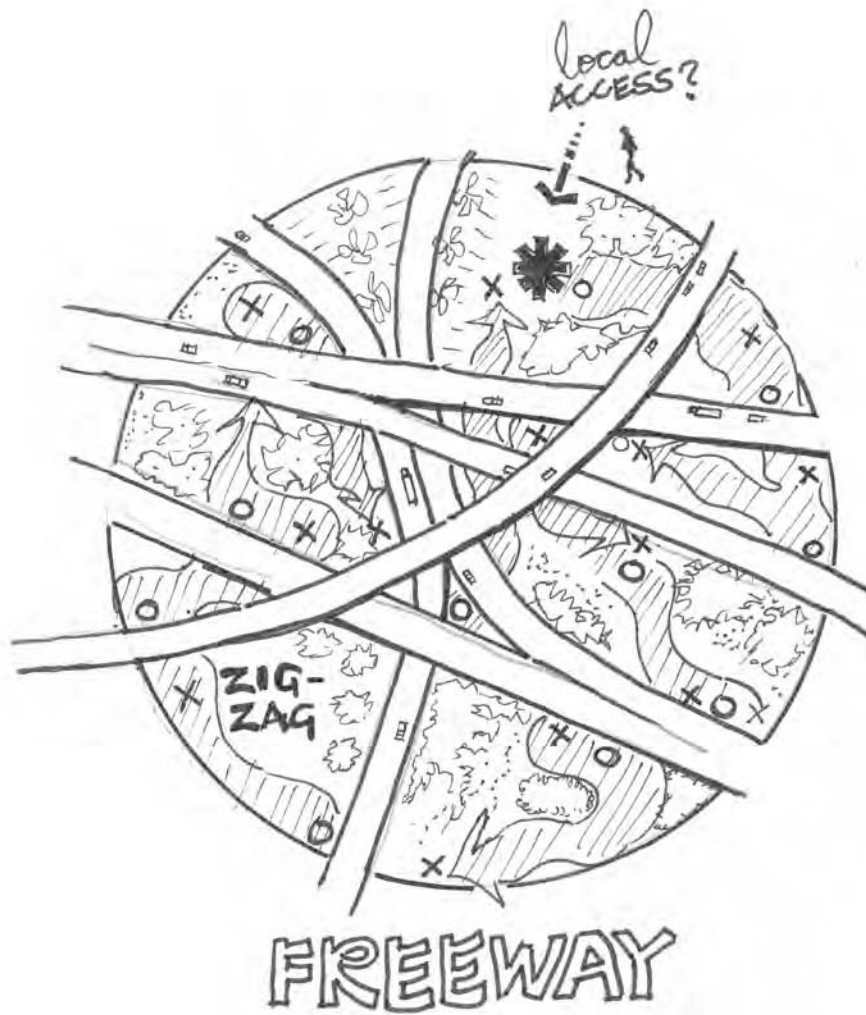


Figure 56. Freeway course

There is a lot of land “going to waste” in the Los Angeles region around and under freeways and interchanges, for good reasons. Nonetheless, the grand scale of some engineered roadways obviates the risk of “projectiles in traffic”, and such sites may be accessible to local neighborhoods by foot, bicycle or transit. A “zig-zag” course routing pattern could take advantage of the interest created by the columnar corridors and contain errant throws more effectively, by design. Engineered slopes with varying aspects to accommodate the elevation of roadways in several directions, may also help contain errant throws as well as create landscape interest. Most likely designers would benefit from being unencumbered

by other recreation users. Based on interviews in this study, many disc golfers were intrigued by the challenge of MANDOS between columns and a chance to play a course on land dedicated to disc golf only. A gateway to such a course that communicates purpose and sense of arrival would be imperative. "Freeway" courses may be better suited as smaller, local courses, rather than "regional draws".

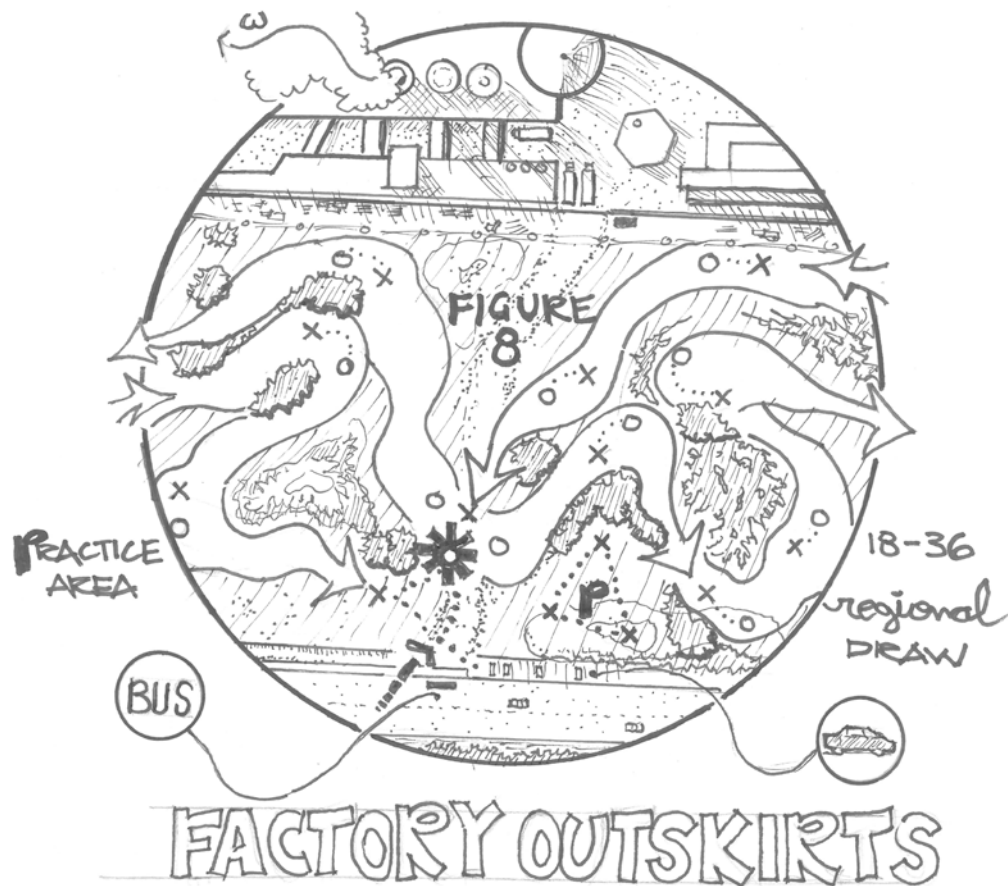


Figure 57. Factory outskirts course

Large industry retains significant land holdings adjacent to existing operations (Mehaffy 2011) in urban regions that are often accessible to major roadways, but left "fallow" until economic conditions are conducive to expansion of operations. Mehaffy (2011) foresees

such lands remaining in limbo for some time, in many cases. Inscribing a disc golf course with its attendant culture may benefit land owners by eschewing less desirable, unmanaged activities from the site, with a self-organizing recreational culture of land stewardship. The relatively low investment of installing a disc golf course makes it a viable option. There is a history of equipment from defunct courses (baskets and tee pads) being acquired for new layouts at different sites (Sandoval 2012).

These large sites may present opportunities to develop courses as “regional draws” accessible to public transit. These courses would do well to have a figure-8 layout similar to Oak Grove, where golfers can break up their rounds by pausing at a central gathering point near the parking area. Besides routing a course as two 9-hole loops, variations of the figure-8 pattern can be laid out to accommodate 27-hole courses or two 18-hole courses. Establishing a practice area near the gathering node helps alleviate course traffic and offers an additional attraction.

Figure 58 is based on a site evaluated for the drosscape survey conducted as a preliminary investigation for this study (Appendix G). Orange County Flood Control and Water Districts manage several groundwater recharge sites throughout a county that is heavily dependent on groundwater (Santiago Creek Vision Plan 2008). Defunct quarries are often the sites for these basins because of the desirable permeability of the soils and locations along the watershed drainages. Recent efforts to connect a network of recreational sites along the Santiago Creek watershed (Santiago Creek Vision Plan 2008) have resulted in multi-use recreational trails and bike paths (Appendix G), but recharge basins and flood control areas are often inaccessible to the public, and may be considered as underutilized

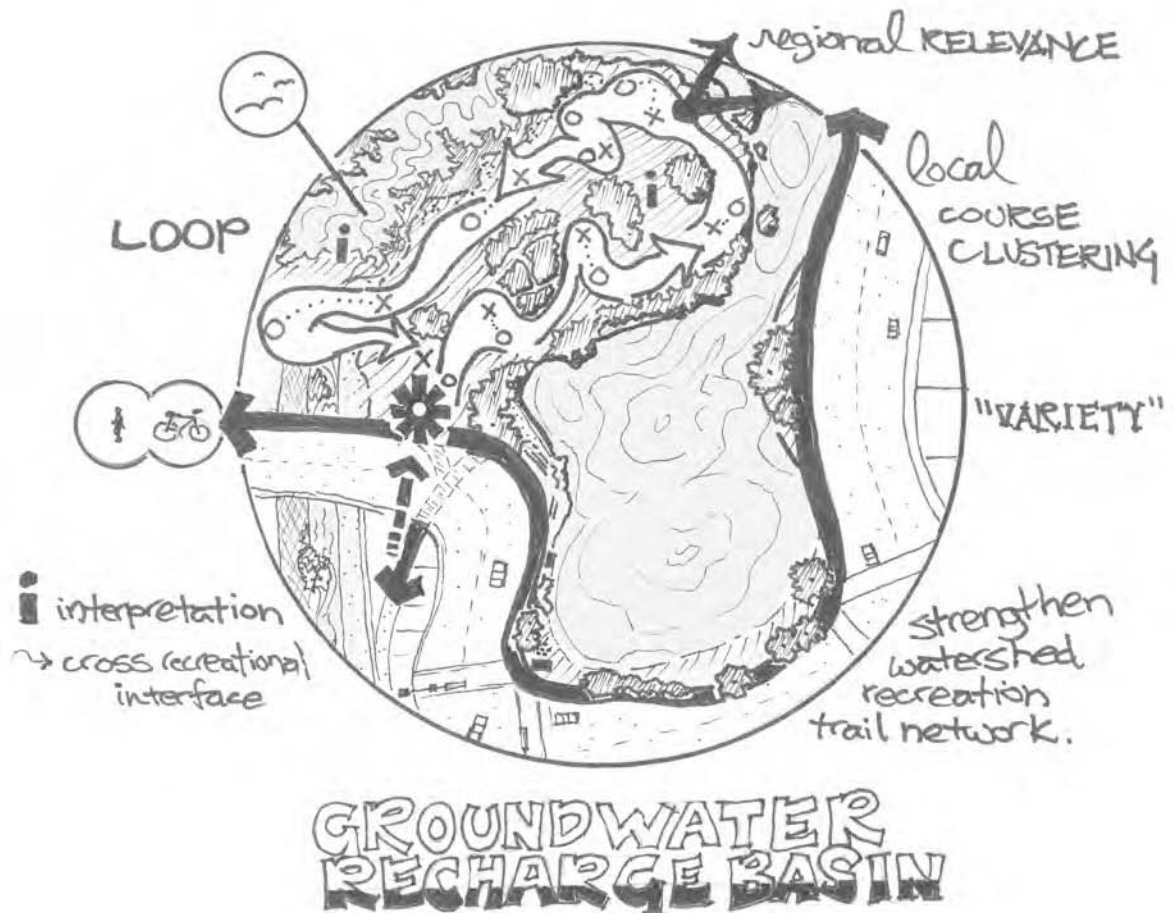


Figure 58. Groundwater recharge basin course

gaps in a patchy urban matrix. These sites offer opportunities for non-motorized access to adjacent residential areas as smaller, local, cluster courses. Such sites may also offer the opportunity for onsite and regional interpretation of ecological processes. Native flora and fauna have been observed to be thriving at the Burris pit site. Figure 58 depicts a short, 9-hole course on a peninsula that would share a “loop” trail with other recreational users. Close coordination with authorities and a strong stewardship ethic of golfers would need to be demonstrated to integrate a course into larger recreation networks inside recharge basins.

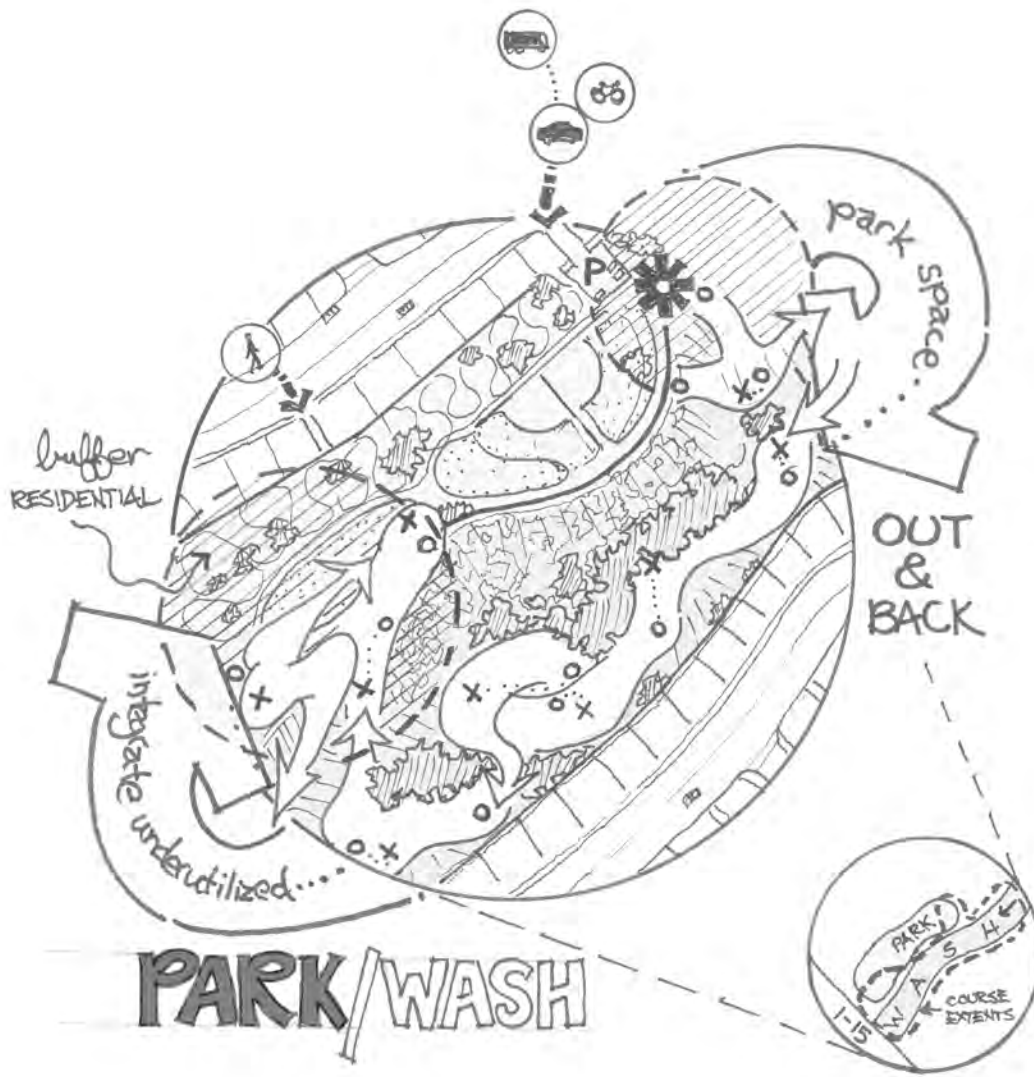


Figure 59. Park/wash course

Figure 59 is closely modeled from the Mountain Pride, Murrieta CA example studied in this thesis as typology IV, urban-center. The original 9-hole layout at the small residential park (light green) utilized the mulched buffer area adjacent to private single family homes, which caused conflict. The 18-hole reconfiguration utilized a wash (pink) extending well west of the developed park, also owned by the City of Murrieta. The reconfiguration shifted an undesirable spatial relationship into an underutilized landscape. The popularity of the

new layout attracts a steady flow of golfers which has reportedly “run-off” deviant behavior and excessive littering in the wash. In addition, the City has provided benches and trash receptacles along the course in the wash, lending legitimacy and respect to the local disc golf community. The softball fields are well used and not utilized in the new course design, while the contingent of local dog-walkers are reported to be happy with the new layout (participant observation). The underutilized portions of the park offer non-disc golf park visitors an opportunity to observe the activity at the fringes of the park space while sparking curiosity as golfers follow their throws down into the wash to continue their rounds, and emerge from the wash at the other end.

The Mountain Pride example is a lesson about how disc golf, as a recreational activity, can both create and resolve use conflicts along edges that abut drosscapes. Park spaces targeted for disc golf should be examined with respect to the potential integration of other types of underutilized linear landscapes along its edges amenable to out-and-back course layouts. Utility corridors and abandoned railroads are just two examples studied here that could also be integrated in a similar fashion. The elevation changes that are common along park edges can be opportunities to make course-flow more legible, create technical interest with shot variety and introduce distinct ecological zones (Whiston-Sprin 1984) along the course route. Implementation of this spatial relationship pattern may ease tensions created by “forcing” entire disc golf courses into previously developed park space while enriching/expanding the mix of onsite activities.

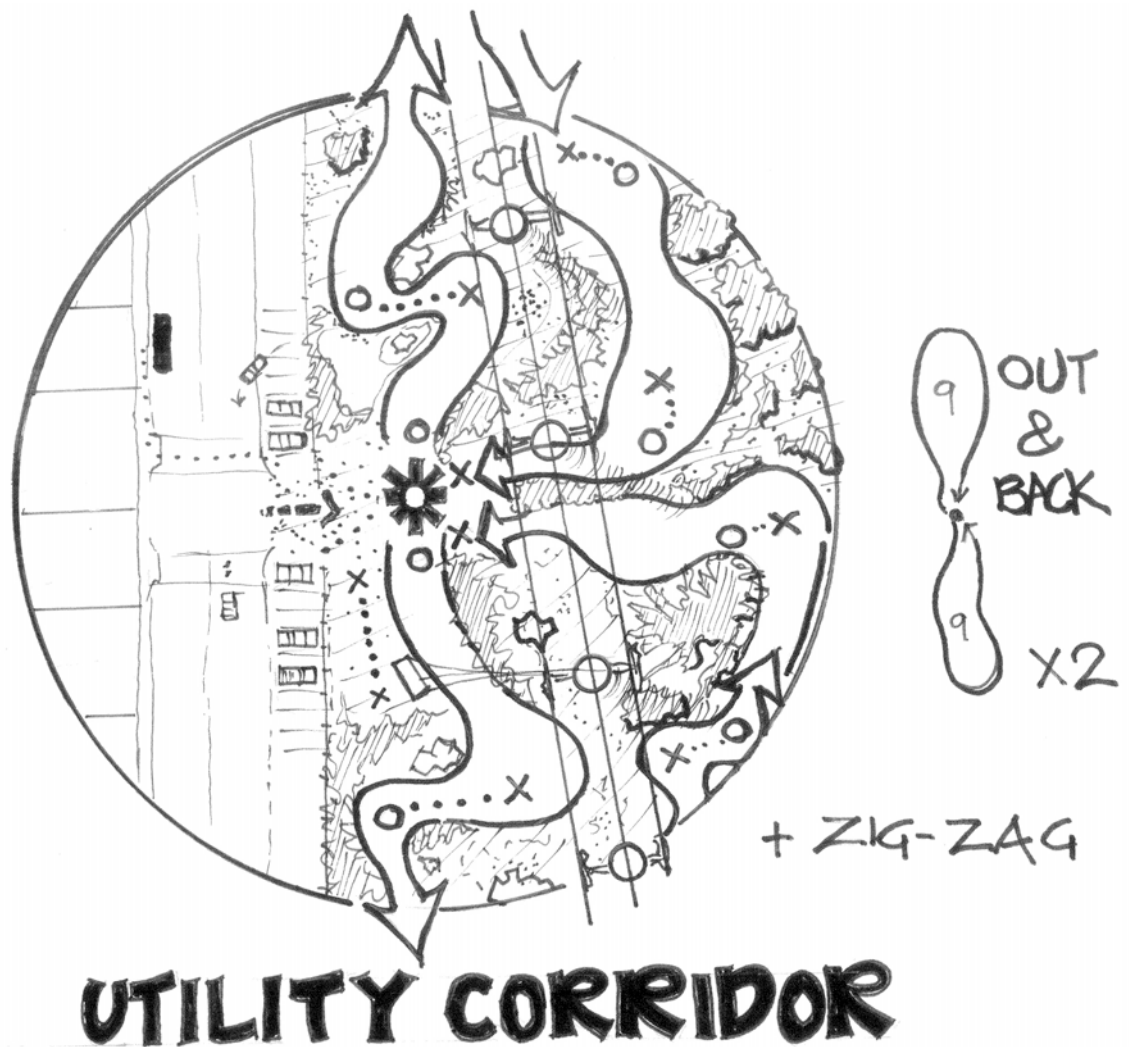


Figure 60. Utility corridor course

The last example of a drosscape spatial relationship for a disc golf course is loosely based on the oft-cited 18-hole course in San Marcos, CA. Several times during interviews, respondents at different sites mentioned playing courses in similar landscapes to the photograph shown for “Utility Corridor” in question 7 (Appendix E). The courses were noted for being easy to understand (legible) and accessible. An out-and-back and/or zig-zag pattern can be used to maximize onsite landscape features or to avoid erosion-prone or otherwise sensitive zones/hazardous zones. If space permits, two “out-and-back” patterns could be combined as shown in Figure 60 to create a distinct front, and back “9”.

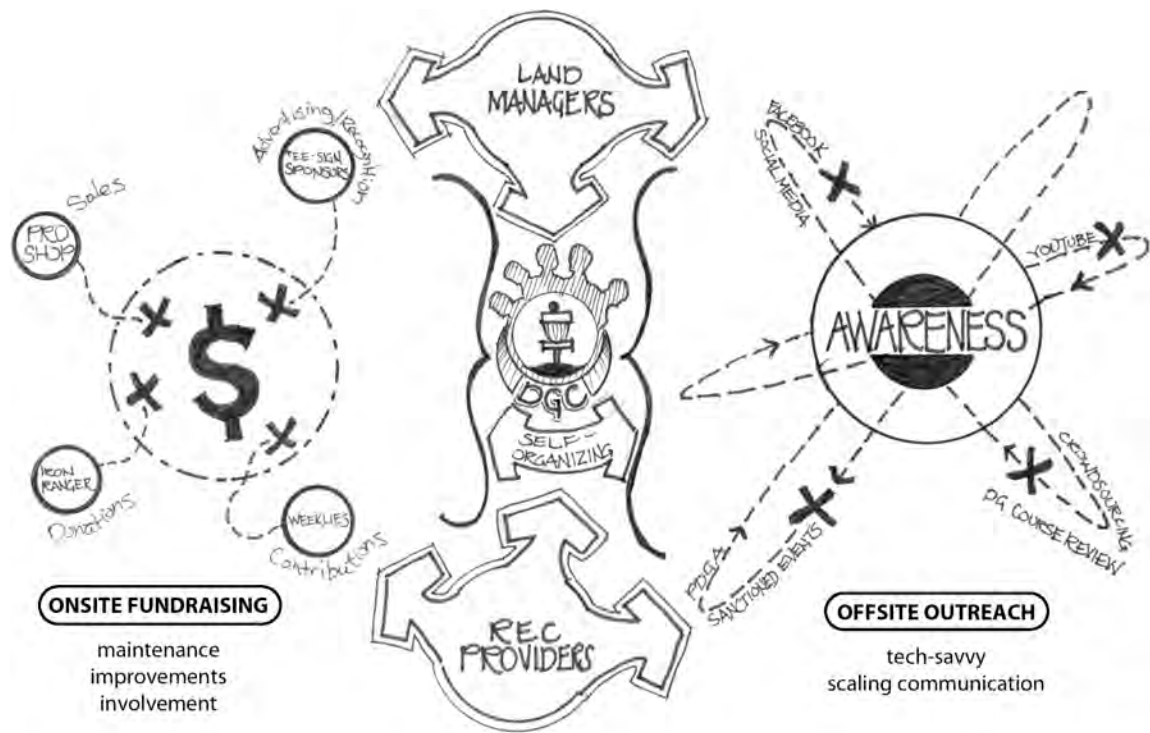


Figure 61. Self-organizing design process

Zooming in closer to the site of a disc golf course – whether it be for the purpose of design improvements of existing courses or new layouts, the roles of all stakeholders should be considered. The four courses studied in this thesis were chosen in part for their popularity for purposive sampling. That all four had active local clubs associated with the course, along with emerging layers of qualitative data from this thesis, suggests that local disc golf clubs – DGC, should be the central actor in course design efforts. The involvement of design professionals experienced in disc golf course design – e.g.: landscape architects, in this process could streamline efforts to discover opportunities and address stakeholder concerns. Designers should work with recreation providers, land owners, land managers and the surrounding community as a consulting liaison to existing local clubs or assist in the establishment of new clubs. To encourage the financial viability and popularity of design improvements or new courses, clubs should act as the primary engine for coordinating

onsite fundraising and offsite outreach (Figure 61). The benefits of self-organizing “civic ecology” are espoused by recent investigations of the concept of “ecodistricts” (Selzter et al 2010) as a place-based social model for sustainable lifestyles. Although disc golf has the potential to spread an “eco-friendly” alternative recreational lifestyle it also has the potential to cause environmental damage (Trendafilova 2011) and social upheaval (Haley 2002). Environmental design professionals can help clubs match the functions of ecological processes with local culture and pre-existing site programming.

Several precedents for **onsite fundraising** exist but must be matched to the goals of each context, such as: course maintenance, improvements and increasing participation. Nominal fees to participate in weekly events help raise money for these goals. Team play and point accrual systems are strategies to bolster participation in WEEKLIES. Retail sales at pro shops (La Mirada, Huntington, Sylmar, Morley Field) can help raise money for courses and provide a focal point for social gathering or information. Where sites cannot accommodate a pro shop, there is opportunity for local sport retail outlets to sponsor tee signs to attract business.

Restaurants and other local attractions in urban areas also stand to benefit from sponsoring tee signs, especially at courses that draw players from other regions and host large tournaments. The installation of an “iron ranger” (Figure 62) donation box at the beginning of a course (hole-1) can also raise significant funds if sited properly to engender a culture of pride – “cues to care”



Figure 62. Iron ranger donation box

(Kaplan, Kaplan & Ryan 1998). Funds raised at popular courses could be allocated towards local club efforts to establish new “satellite” courses clustered in their area.

Efforts to increase **offsite awareness** of an existing or potential course can directly or indirectly improve onsite fundraising efforts. The Professional Disc Golf Association (PDGA) is involved with sanctioning and promoting disc golf tournaments and events all over the country. Hosting sanctioned events draws new players from outside the region (Simons 2012). Citing the money spent by these visitors on food, lodging and local attractions can strengthen the case to City, County, or local agency stakeholders that disc golf is a viable recreational strategy, especially if a region becomes known as a MECCA (Appendix D: Disc golf abridged glossary of terms).

The website dgcoursereview.com is a valuable resource for traveling disc golfers (Gostovic 2013). Several respondents in this study mentioned that they consult the website for course reviews when they travel beyond an approximately 30 mile radius from home. The services of the website are open-source, but joining social media groups that form out of the activism of local disc golf clubs (DGC), such as the Facebook group for Murrieta DGC, contributes to a sense of belonging in an active culture by providing a convenient forum to arrange tee times, travel CARAVANS to other courses or work days. Finally, online video posting services such as Youtube offer accessible opportunities to post positive portrayals of local course character or culture, online. At least one of the respondents in this study was influenced to travel to La Mirada based on his positive response to videos he viewed on Youtube which was recorded/filmed at that course.

Helphand (1995) suggested that “ball” golf course design closely mirrors the nested nature

of traditional garden structure in its hierarchy of spatial relationships experienced in a ballistic (movement) fashion. Disc golf course design stands to benefit from examining the finer-grain nested layers that inform ball golf design. The significantly smaller size of the object and target (Figure 11), and the requirement to play the object (ball) from the ground plane instead of standing at your LIE and releasing the object (disc) directly from your hand, tends to miniaturize our perception of landscape features in many respects (Kaplan, Kaplan & Ryan 1998). In ball golf, the green, the fringe, the apron, and the rough are often more clearly defined, contributing to finer grain course legibility (Figure 63). A quote from Chapter 2: Literature Review is worth repeating here, in this final section of **guidelines for the site scale**: “Great courses heighten your awareness of the lay-of-the-land and its visceral aesthetic sensibility carrying with it an awareness of slope, distance, undulations and patterns” (Helphand, p. 80).

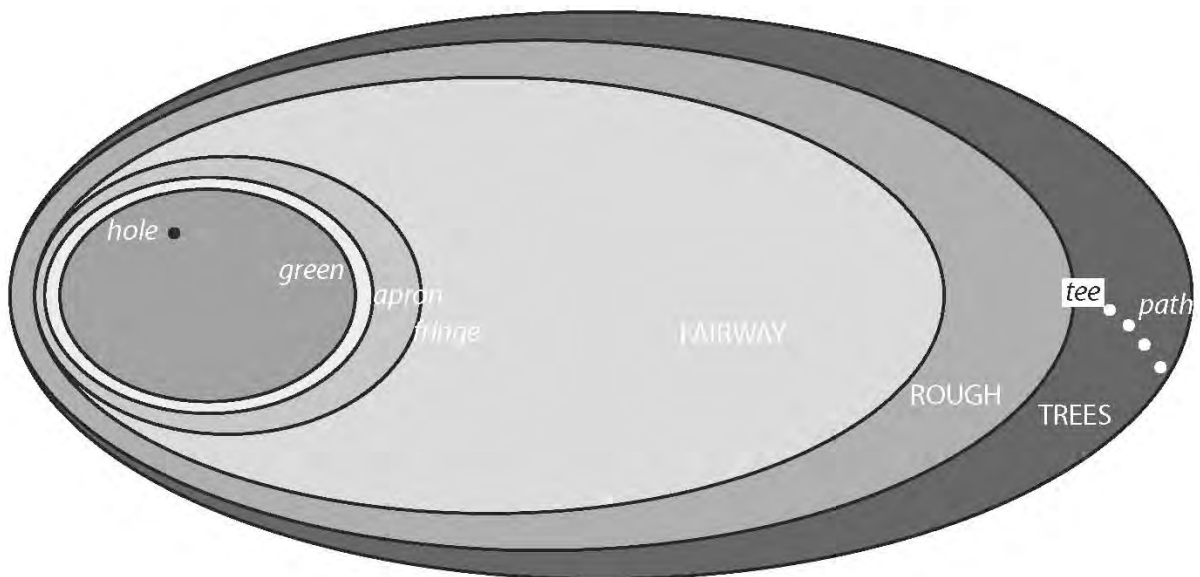


Figure 63. Nested hierarchy of a golf hole

Disc golf course designers have the opportunity to bring more attention to the nested layers of the ground-plane by considering the conventional golf design strategies of penal, strategic and heroic (Doak 1998), in conjunction with principles of variation and balance (Graves & Cornish 1998, Houck 1998b and Schackelford 2003). Adopting such a strategy can not only improve course flow legibility as a way to order landscape complexity with pleasing variation for players, but also helps non-disc-golf site-users to spatially understand and respect the activity.

The first strategy the designer should consider at any any course is an organizing node that acts as a gateway and focal point (Lynch 1960). Even to disc golfers who are familiar with a course layout, groups of players often seem to be “wandering” around the landscape. Several respondents in this study expressed some frustration figuring out layouts when visiting other courses and a lack of awareness from other park users. The large boulders acting as traffic bollards near hole-one, a picnic table at hole-10, and private automobiles in the parking lot were the effective gathering elements at Oak Grove. The space between the tennis courts and the shared pro-shop at La Mirada serves as a well defined gathering area, but attention to various signage and orientation to hole sequence is diffuse. The pro shop at La Mirada is a valuable course resource and gathering node but lacks an open, public sense of place. Yucaipa and Mountain Pride both had dedicated informational boards but they were poorly placed away from natural activity nodes in relation to the courses.

Figure 64 depicts a gathering node concept with elements designed to draw attention, inform, delight (Keys 2010), offer comfort from climate, and help define course flow. Each site has its own conditions to consider of course, but this example provides an elemental tool kit. If funds and space allow, two “kiosks” reflecting each other inwardly defines space, creates

hierarchy and can orient players to the first tee. On one side an “informational” board could serve to orient new players to the course as well as welcome/educate curious park patrons about disc golf as a game, its background in the setting and spatial relationship (map) to the



Figure 64. Gathering node

rest of the recreation area. Ideally, this should be a permanent, laminated sign finalized only after course layout design is complete and approved. Involvement with a design professional would help ensure timely installation and accurate information. A “public” board could be installed earlier, during course development to serve local activities and club activism with an interactive pin-up display surface. Houck (1998b) suggests beginning course design on a new site by identifying the SIGNATURE HOLE first. The research for this study suggests the gathering node should have “equal footing”. A paved surface or other permeable ground plane should help make the gathering area distinct from its surroundings. When possible the gathering node should be located by way of close visual sight lines to tee 1 and basket 18 (or 9, 27, etc.), and at the junction of figure-8 or double out-and-back course routing patterns.

Finally, a well defined gathering node is the ideal location to educate and inform users of the trash policy. At sites that are multi-use recreation areas, trash receptacles should be clearly designated on at least three holes (per 18), evenly distributed in sequence and accessible to maintenance employees or club volunteers. In drosscape settings developed for disc golf where it may be the only site-use, a “pack-it-in, pack-it-out” trash policy common in wilderness areas has been shown to be very effective with clear signage and cultural support. Drosscapes: another shade of wilderness experience?

Tee areas provide a resting or pausing point where golfers take a moment to reorient themselves to the next hole, take comfort in the shade, and socialize or wait for another group or individual golfer to PLAY THROUGH. Not all tee areas require seating, but a guideline of 50% of holes overall and seating on at least every third tee, may satisfactorily serve a diversity of users in age and physical condition. Seating around tee areas should provide a clear prospect onto the fairway if possible and be placed a minimum of 6 feet behind the

back of the tee pad. There are many possibilities for bench designs and onsite improvisation, but through interview responses and participant observation this research has revealed a desire for uniformity, not only for comfort, but for legitimacy and continuity. In the case of Mountain Pride, the City of Murrieta provided manufactured benches for some of the tee areas that matched the furniture throughout the park. Superadobe (Cal Earth 2013) and rammed earth are two examples of earth-building techniques that can result in an aesthetically pleasing, unique and functional option that can involve local club members or community groups such as the Boy Scouts in service-learning activities that lead to course improvements using onsite materials. Deciding on a consistent style or model of seating throughout the course not only helps build legitimacy for disc golf as an activity, but also can aid in course flow. When a course might integrate, or cross another recreation use, a distinct furniture style of each use may help legibility while adhering to an overall theme.

Figure 65 also illustrates a “mix & match” approach to tee pad shape and materials. In all

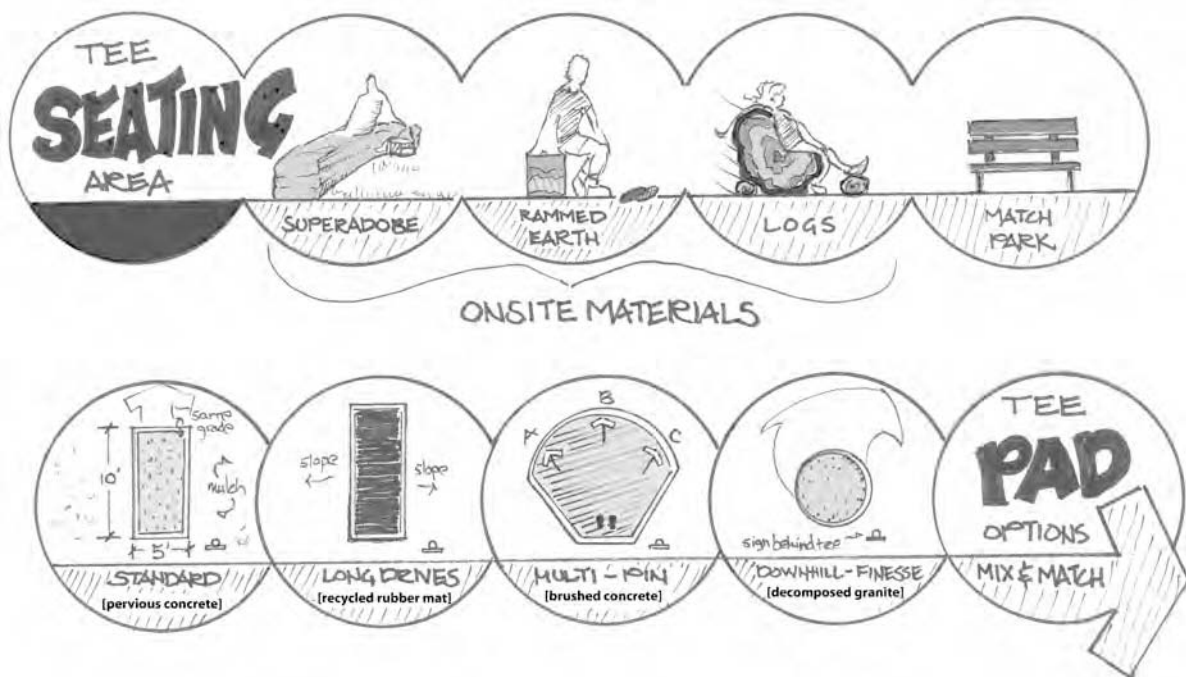


Figure 65. Tee Area

cases a sturdy frame and a well prepared level surface (aggregate base) should be the first step. Tee pads and the area around them are heavily trampled. Extra care needs to be taken to prevent erosion and the collection of moisture from precipitation or runoff. Avoid siting tee pads and their seating areas at low points in the landscape and always place tee signs behind and to one side (consistently left or right) of the pad. Permeable materials such as pervious concrete, pervious pavers (not shown), recycled rubber mats and decomposed granite can effectively drain water with a proper substrate (gravel) preparation. Conventional (impervious) concrete pads should be sloped at 1-2% to the desired drainage direction(s). A regular source of organic mulch onsite should be identified to maintain 3-6" of cover over bare ground in the tee area to help slow percolation, prevent erosion and pooling of water, as well as providing an aesthetic "apron" that defines the area. Uniformity breeds familiarity (5' X 10' is standard), but adjusting the size and shape of the tee pad to fit each hole's context can minimize materials or maximize function. Very long holes requiring a long "run-up", multiple pin positions at varying angles, and short downhill holes requiring finesse shots are examples illustrated above. These strategies can help accentuate the "variety" of a course.

The site evaluation at La Mirada exemplifies a common practice in tee placement/design at disc golf courses where hash-marks are painted along park paths in order to utilize a pre-existing smooth, flat surfaces. Participant observation has shown that this practice creates confusion for new players as well as path users, while also detracting from the legitimacy and legibility of disc golf. While it saves resources and time, this practice may also pose safety concerns/use conflicts and should only be utilized as a temporary solution until a permanent tee area can be sited/constructed that doesn't take over or cross common paths for other users.

Hole connectors paths are a design element of disc golf courses which was absent from all interview responses and participant observation dialogue. Nonetheless, this ignored, utilitarian design element has the potential to address several critical themes discovered to be important for disc golf course design. Once a player HOLES-OUT they may be anxious to proceed to the next hole. Many courses have tried to minimize the length of paths from “green” to next tee area in order to maximize space available. Landscape ecology principles (Benson 2000), extent and mystery (Kaplan, Kaplan and Ryan 1998), wayfinding (Kaplan, Kaplan and Ryan 1998), and safety (Houck 1998b), can all be addressed with connector path design. Well defined, narrow paths with interesting textures visually accessible on the ground, embracing at shoulder level, and inspiring with long views, can serve to quell anxiety before sending your discs back into play again. Disc golf courses have the advantage of being one-way routes. The wide spray pattern of discs thrown from the tee and fairway (West 2012) induces broad trampling of the landscape (in the next section fairway design will be discussed). Connector paths are opportunities to confine/guide foot-traffic while allowing for corridors, patches and mosaics of vegetation/habitat that add visual interest and define separation of fairways.

At Mountain Pride, for example, there is a particularly long connector path which passes close to a line of residential backyards where a fairway would be inappropriate. There is disturbed land with invasive mustard plants and a poorly defined path. When initially laying out a course design areas such as this that are not suited for fairways should be noted as possible connector paths. Reducing the number of holes targeted for a course on a particular site to provide appropriate hole connections and improved play should also be considered. This researcher occasionally injected a prompt about interest in interpretive signage on

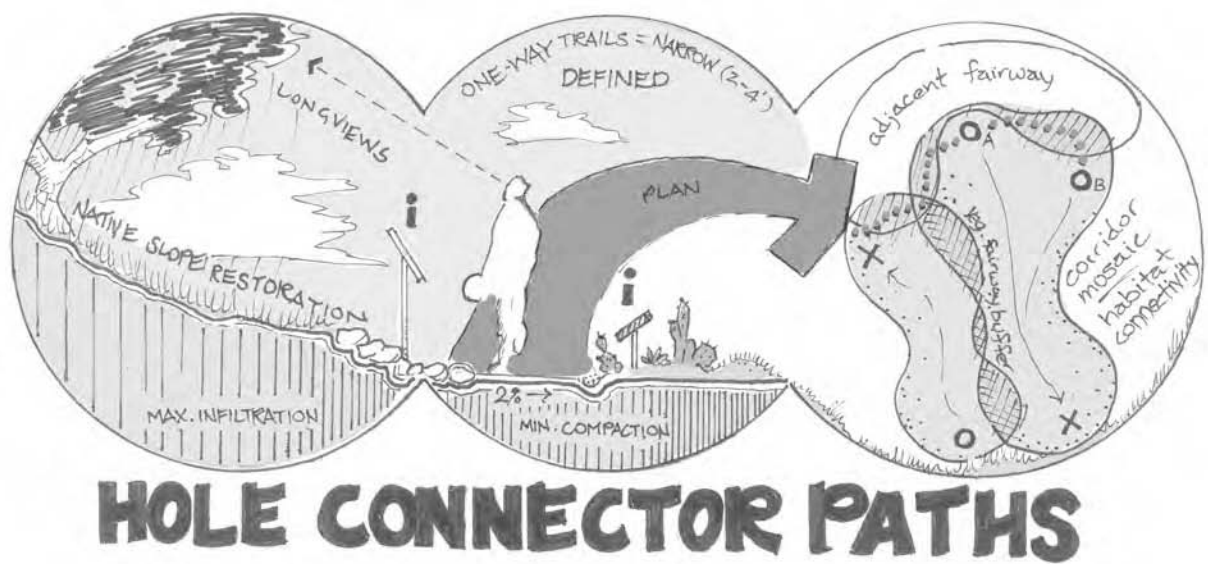


Figure 66. Hole connector paths

courses during Interview responses to Question 3: Why do you play this course? These responses were not subjected to content analysis because they were not consistently applied, but resulted in interesting qualitative data nonetheless. Several enthusiastic responses showed that there are disc golfers interested in learning about flora, fauna or local history when they play a course, but some questioned the appropriateness of interpretive signage at tee areas. Besides the main gathering node, connector paths would be ideal passive locations for such signage. For example, if a course designer wished to develop a theme for a course, holes could be “named” on tee signs and supporting interpretive information could be given along the subsequent connector paths. The recharge-basin example (Figure 58) is a potential model for integrating non-disc golf users into the course-routing pattern. Paths between holes (perhaps with intermediate seating/viewing areas) would be the key design element for implementing such a strategy.

Placing interpretive signage only at the gathering node or providing free course maps that also contain brief interpretive guides correlated with numbered stakes along trails are

strategies to obviate the need for expensive signage. Defining path edges with local materials (keyed-in rocks and logs) and defined, welcoming entrances to paths following HOLEOUT also can obviate the need for “next tee” signage.

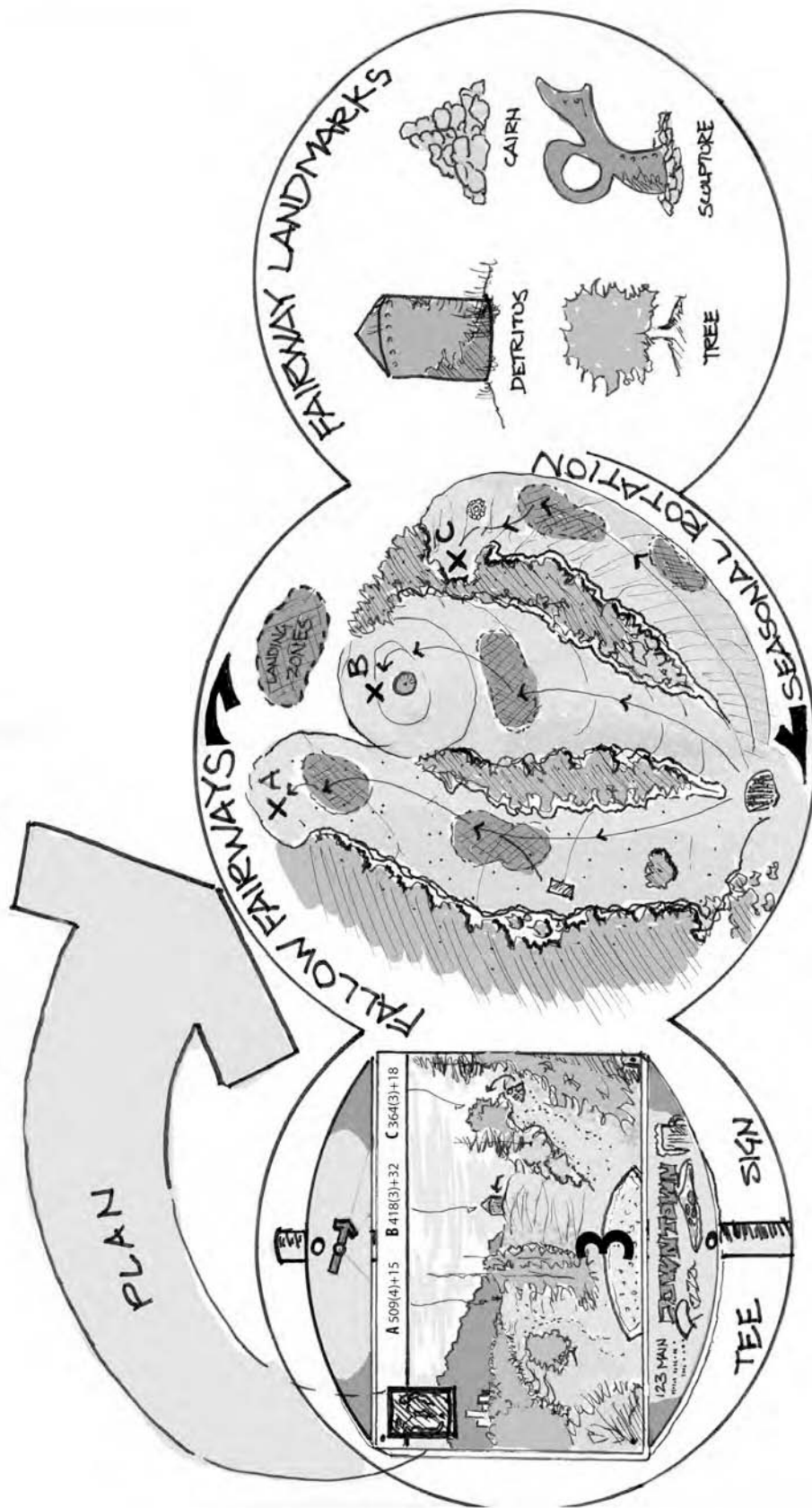
As stated earlier, fairways are the parts of a course which receive the most abuse through foot traffic patterns based on throws from a variety of skill levels on the same course. Whenever possible do not site tee areas in locations where live tree trunks or large limbs are located in the fairway less than 30 feet away for the sake of tree health (Lichter 2005) and flow of play. The basket (pole-hole) should be clearly visible to a player standing on the tee pad on a majority of the holes. Respondents to interviews who discussed preferences at courses they played explained that they liked to see the basket most of the time because it helped orient them and visualize the hole. On the other hand, the same respondents expressed enthusiasm for “blind holes” as a challenge or in the interest of variety, but described the importance knowing where the basket is located in relation to a landmark in the fairway. Fairways can be located along/adjacent to pre-existing paths or roads (fire roads make great fairways), but tee areas and likely approach angles should not disturb other users of the circulation system. Once a new course begins to experience more play, desire lines should be carefully observed to determine where it might be appropriate to improve/define narrow paths or spread mulch and/or seed in other areas of the fairway.

Fairways can face the problem of monotony, that is, sameness of the landscape, which can make it difficult to find your disc (LIE) and is counter to the “landscape variety” that is highly ranked as an attraction in this study. Figure 59 illustrates two strategies to address this tendency. Landing zones borrow from the ball golf playbook. By creating relatively level areas which offer a visual change in color and texture, intermediate targets (goals) can help

make play more interesting and strategic. Well designed landing areas can offer level footing in a rocky or otherwise uneven landscape as well as afford a favorable angle to the target (pin), if one were to succeed in landing their disc within the zone. Also, novice players are given sub-goals. Can't you see the side-bets, new games and imaginative rules emerging already?

The second strategy is to either utilize existing landscape features or site new features to assist players in locating and gauging their fairway throws. Existing industrial detritus in drosscape settings can be used to create challenge (heroic shots) or identify pin location in the landscape or on signage. Rocky sites are amenable to the stacking of cairns as landscape markers and can be done with artistic flair incrementally, while clearing paths of excessive field stones for easier walking. Large sculpture utilizing industrial detritus materials from drosscape settings could be designed by local artists to fit the landscape and provide functions to hole layouts, including MANDOS, obstacles and wayfinding. Thematic narratives can be established.

Of the four courses studied only La Mirada had permanent tee signs. Respondents described the helpfulness of locals to find their way when they visited other courses, and that it was sometimes a great way to meet people, but frustration and lack of "legitimacy" when signage was absent, especially when time was short. The tee signs at La Mirada are fairly typical. They help create course uniformity and legibility with permanent laminated color signs that offer a very simplified plan-view of the fairway and pin positions for each hole. Participant observation revealed that the indistinct circles and blobs representing trees in the landscape were often difficult to "read" and relate. Figure 67 illustrates a signage scheme which orients the player from behind the tee pad with a perspective or photographic view of the fairway and a smaller plan view inset. Fairway landscape features



FAIRWAY MANAGEMENT

Figure 67. Fairway management

are identified to help players locate blind pin positions. In the example of a hypothetical hole-3, there are three fairways for three different pin positions. If there is sufficient land available, offering multiple fairways not only lends itself to varying the play of the course but also to resting (closing/letting lay fallow) fairways for restoration, improvement or natural recovery. Some fairways may be closed during the wet or dry season, or particular growing season of a plant species, depending on the site characteristics.

The signage scheme illustrated also offers flexibility of whether to have a 'pin position dial' and/or advertising space. Traditionally a washer with letters etched in the metal indicating pin positions (A,B,C etc), is turned to the present location in the vertical position. The design modification shown allows the player to see the position as she approaches the tee area. If a Global Positioning Device (GPS) device is available to the designer(s), hole length and elevation change should be indicated next to each position, as well as par, such that: [A 509(4)+15], means “pin position A is 509 feet away from the tee, is rated as a par-4 and rises 15 feet in elevation from tee to pin”. Experienced players find elevation change very useful when gauging their throws and strategy, and ties in closely to the highly ranked attraction to disc golf found in this study: “flight of disc”. When there is only one pin-position the upper portion of the sign (dial) is not needed. As discussed earlier, tee sponsors can help fund on-site course improvements. A sponsor will get the most benefit out of a signage advertisement if they can choose the hole and if there is desirable seating and shade in view of the tee sign. Again, this signage scheme allows spatially for not having a sponsor, or usurping that space with interpretive or local club information, as appropriate.

The final site scale course design element presented in these guidelines and recommendations is **pin position and “green” design**. While the fairway guidelines and

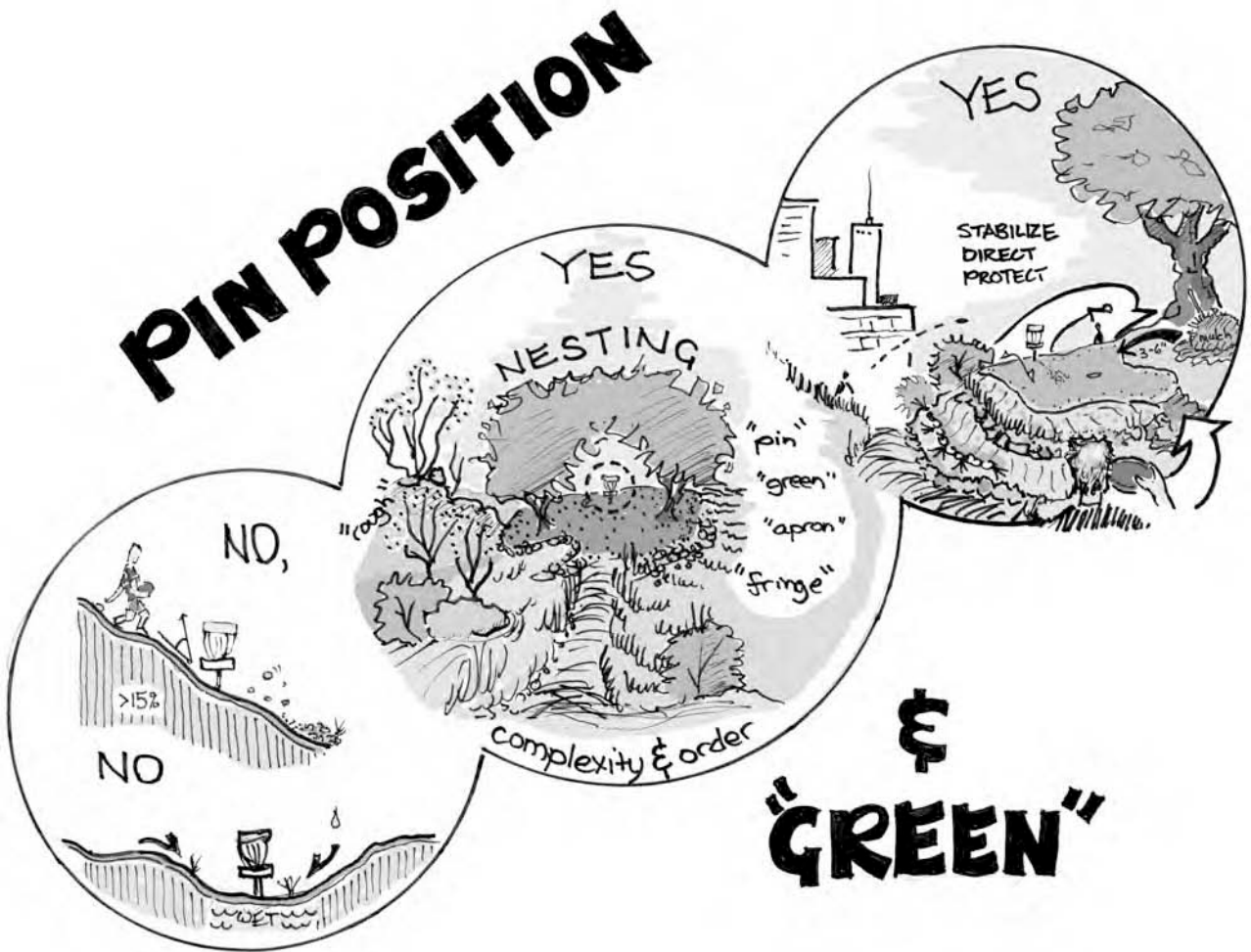


Figure 68. Pin position and "green"

and recommendations addressed the player landscape experience of orientation and flow on the way to the target (pole-hole, pin), the concentric rings around the target is concerned with completion (denouement). In disc golf the whole experience of tee, fairway and pin position can become one in the case of short and/or downhill holes where the target area is clearly visible. A mix of longer and short holes is desirable, as well as planning for long holes where the target is clearly visible from the tee, although not reachable (by all but the longest drivers).

As shown in Figure 68, the target itself should not be located at low points or along the

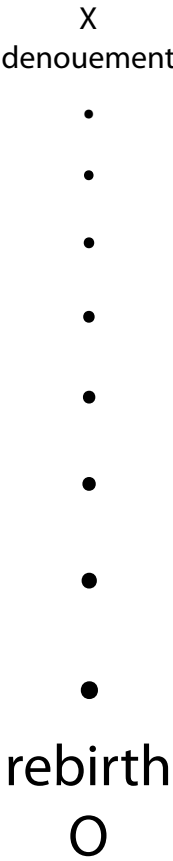
bottom of drainage-ways (swales). Even days or weeks after precipitation these areas can remain saturated or wet, exacerbating the effects of repeated and inevitable trampling, such as soil compaction. Conversely, targets should not be located on steep slopes, especially where bare soil is present, to avoid erosion which can damage plant root systems and cause failure of the pole-hole anchoring system (usually a concrete footing). In addition, steep slopes around an engineered object pose accessibility and safety concerns.

The central drawing in Figure 68 is modeled after the diagram depicted in Figure 63 to show conceptually how disc golf can employ the nesting hierarchy of golf (Doak 1998) to create the kind of complexity and order required for peak flow experiences (Ciszkoszmihiyi 1990). In this example the tall grassy/weedy area is the “fringe”, from which the player would attempt to either LAYUP, or sink a long PUTT. The “apron” in this example is an orderly border of rocks (field stones) between the fringe and the “green”. A low shot may be halted or deflected by the rocks to provide an element of risk/reward while also helping to frame the “green”. The “green” itself should be well mulched when possible with local organic material, to provide favorable footing for putting, free of other debris. Disc golf has an advantage over ball golf in its ability to bring play underneath tree canopies, to provide hazards, challenge skills and create micro-environments. The Litter from the trees themselves should be retained and managed to create a desirable putting surface. Rugged terrain “rough” can send signals to the players to err to one side of the fairway to avoid sensitive habitat. Rocky, steep and heavily vegetated areas can be valuable aesthetically, define/separate fairways, and provide habitat connectivity. Inevitably, these areas of “rough” will receive errant throws and trampling by disc golfers, especially near the “green” but intelligent application of these nesting principles by observing play can minimize the damage. Periodic efforts should be

made to reseed or mulch disturbed areas, including letting entire fairways lay fallow, when possible, as described above.

Although baskets should not be placed on steep slopes, elevation change should still be an integral component of successful disc golf course design, as corroborated by the findings from the interviews conducted for this study. Baskets can be well located on the crests of subtle spines or ridges in the landscape which drain to either side. Steep slopes approaching an elevated green area can be stabilized with rip-rap, native grass seeding and/or fascines (live stakes of native plant material). In order to avoid trampling of these slopes, attractive, accessible and highly visible paths or steps must be constructed as alternatives (Figure 68).

Ching!



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Figure 2. "Top-down, bottom-up." Based on Irwin, Elena G., Ciriya Jayaprakash, and Darla K. Munroe. 2009. drawing adapted by Michael Plansky. January, 2013.

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Figure 6. "Oak Grove historic sign." Disc Golf Association. *Website*. Image retrieved March 15, 2013. <<http://www.discgolf.com/disc-golf-history/>>

Figure 7. "Oak Grove present day character." Hahamonga Watershed Park, Pasadena, California. Digital photographs by Michael Plansky. April 4, 2013.

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Figure 10. "Course routing patterns." Based on Doak, Tom. 1998 & Dramstad, Wenche E., James D. Olson and Richard T.T. Forman 1996. drawing adapted by Michael Plansky. February, 2013.

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Figure 17. "Callois forms & Sutton-Smith rhetorics within quadrants & disc golf relevance." Adapted from Gordon, Gwen, and Sean Esbjorn-Hargens. 2007. Adapted by Michael Plansky. April, 2013.

Figure 18. "Disc golf flow channel diagram." Adapted from Csikszentmihalyi, Mihaly 1990. Drawing adapted by Michael Plansky. February, 2013.

Figure 19. "Continuums of characteristics of fixed and adaptable spaces." Adapted from Hester, Randolph 1975. Adapted by Michael Plansky. April, 2013.

Figure 20. "With people in mind." Drawings by Ryan, Robert, In Kaplan, Rachel, Steven Kaplan and Robert Ryan 1998. Layout adapted by Michael Plansky. April 2013.

Figure 21. "LA-Region drosscape disc golf survey." Adapted from Google Maps 2012. *Website queries*. Retrieved April 15, 2012. <<https://maps.google.com/maps?>> Digital photographs by Michael Plansky. April, 2012, and Elizabeth Gallardo. February, 2012.

Figure 22. "Lifestyle sports attractions & characteristics." Based on Wheaton, Belinda 2000, 2004. Graphic layout adaptation by Michael Plansky. November, 2012.

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Figure 24. "Course typology selection diagram." Based on Lehrman, Barry 2013. *Personal Consultation*. Rm. 128, bldg. 2. Cal Poly Pomona. Discussed January, 2013. Also based on DG CourseReview. *Website queries*. Retrieved February 15, 2013 <dgcoursereview.com/> Hand-drawn diagram by Michael Plansky. February 15, 2013.

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Figure 32. "Typology_III La Mirada site map." Adapted from Google Maps 2013. *Website query*. Retrieved April 15, 2013 <<http://maps.google.com>> Drawn by Michael Plansky. April 16, 2013.

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Figure 41. "Demographic breakdown at Oak Grove (TYP I)." Adapted from Math Warehouse n.d. *Website queries*. Retrieved April 16, 2013.
<<http://chartmaker.mathwarehouse.com/create-pie-chart/>> Drawn by Michael Plansky. April 17, 2013.

Figure 42. "Demographic breakdown at Yucaipa (TYP II)." Adapted from Math Warehouse n.d. *Website queries*. Retrieved April 16, 2013.
<<http://chartmaker.mathwarehouse.com/create-pie-chart/>> Drawn by Michael Plansky. April 17, 2013.

Figure 43. "Demographic breakdown at La Mirada (TYP III)." Adapted from Math Warehouse n.d. *Website queries*. Retrieved April 16, 2013.
<<http://chartmaker.mathwarehouse.com/create-pie-chart/>> Drawn by Michael Plansky. April 17, 2013.

Figure 44. "Demographic breakdown at Mountain Pride (TYP IV)." Adapted from Math Warehouse n.d. *Website queries*. Retrieved April 16, 2013.
<<http://chartmaker.mathwarehouse.com/create-pie-chart/>> Drawn by Michael Plansky. April 17, 2013.

Figure 45. "Travel mapping at Oak Grove (TYP I)." Adapted from Google Maps 2013. *Website query*. Retrieved May 2, 2013 <<http://maps.google.com>> Adapted by Michael Plansky. May 2, 2013.

Figure 46. "Travel mapping at Yucaipa (TYP II)." Adapted from Google Maps 2013. *Website query*. Retrieved May 2, 2013 <<http://maps.google.com>> Adapted by Michael Plansky. May 2, 2013.

Figure 47. *"Travel mapping at La Mirada (TYP III)." Adapted from Google Maps 2013. Website query. Retrieved May 2, 2013 <<http://maps.google.com>> Adapted by Michael Plansky. May 2, 2013.*

Figure 48. *"Travel mapping at Mountain Pride (TYP IV)." Adapted from Google Maps 2013. Website query. Retrieved May 2, 2013 <<http://maps.google.com>> Adapted by Michael Plansky. May 2, 2013.*

Figure 49. *""Why I play Oak Grove" attraction diagram (TYP I)." Designed by Michael Plansky. May 10, 2013.*

Figure 50. *""Why I play Yucaipa" attraction diagram (TYP II)." Designed by Michael Plansky. May 10, 2013.*

Figure 51. *""Why I play La Mirada" attraction diagram (TYP III)." Designed by Michael Plansky. May 10, 2013.*

Figure 52. *""Why I play Mountain Pride" attraction diagram (TYP IV)." Designed by Michael Plansky. May 10, 2013.*

Figure 53. *"Metaphysical/proto-cultural play-ground". Adapted from Berger 2006, Csikszentmihalyi 1990, Huizinga 1938, Hester 1975, Kaplan, Kaplan & Ryan 1998, Lefebvre 1992, Pieper 1952, Wheaton 2004, and Whiston-Sprin 1984. Drawn by Michael Plansky. April 10, 2013.*

Figure 54. *"Urban disc golf course design playbook". Designed and drawn by Michael Plansky. May 20, 2013.*

Figure 55. *"Urban disc golf course distribution optimizer". Designed and drawn by Michael Plansky. May 25, 2013.*

Figure 56. *"Freeway course". Designed and drawn by Michael Plansky. May 29, 2013.*

Figure 57. *"Factory outskirts course". Designed and drawn by Michael Plansky. May 29, 2013.*

Figure 58. *"Groundwater recharge basin course". Designed and drawn by Michael Plansky. May 30, 2013.*

Figure 59. *"Park/wash course". Designed and drawn by Michael Plansky. May 30, 2013.*

Figure 60. *"Utility corridor course". Designed and drawn by Michael Plansky. May 30, 2013.*

Figure 61. *"Self-organizing design process". Designed and drawn by Michael Plansky. May 31, 2013.*

Figure 62. "Iron ranger donation box". Iron Rangers LLC. Website. Retrieved June 3, 2013
<<http://ironrangersllc.com/indexpage2.htm>>

Figure 63. "Nested hierarchy of a golf hole". Adapted from Doak 1998. Graphic by Michael Plansky. Jun 4, 2013.

Figure 64. "Gathering node". Designed and drawn by Michael Plansky June 5, 2013.

Figure 65. "Tee Area". Designed and drawn by Michael Plansky June 6, 2013.

Figure 66. "Hole connector paths". Designed and drawn by Michael Plansky June 6, 2013.

Figure 67. "Fairway management". Designed and drawn by Michael Plansky June 7, 2013.

Figure 68. "Pin position and green". Designed and drawn by Michael Plansky June 7, 2013.

A: Informed consent form

- California State Polytechnic University, Pomona -

Informed Consent Form for Research Involving Human Subjects

You are being invited to participate in a research study, which the Cal Poly Pomona Institutional Review Board (IRB) has reviewed and approved for conduct by the investigators named here. This form is designed to provide you - as a human subject - with information about this study. The Investigator or his/her representative will describe this study to you and answer any of your questions. You are entitled to an Experimental Research Subject's Bill of Rights and a copy of this form. If you have any questions about your rights as a subject, complaints about the informed consent process of this research study, or experience an adverse event (something goes wrong), please contact the Compliance Office within Cal Poly Pomona's Office of Research at (909) 869-4215. More information is available at the IRB website, www.csupomona.edu/research/irb.

INSCRIBING LIFESTYLE: SOUTHERN CALIFORNIA DISC GOLF COURSE DESIGN

Cal Poly Pomona Institutional Review Board (IRB) protocol number: 13-007


My name is Michael Plansky. I am a graduate student studying Landscape Architecture at Cal Poly Pomona conducting a **field study** for my Master's thesis about **disc golf**. The method is a short and loose face-to-face interview, often referred to by academics as "**semi-structured interviews**". There are only 7 basic questions in the this **10 minute** recorded interview meant to explore different themes. I will also be taking notes to help with my transcription. Digital recordings will be deleted within one month and kept secure & offline. Only myself and my primary academic advisor (listed below) will have access. Transcriptions and surveys data will be kept in secure locked file until January 20, 2014, when they will be destroyed. Risks of participation are minimal and participation is voluntary.

Your values, beliefs, attitudes and perceptions about disc golf may help me in my research to discover how future disc golf course design could be culturally placed into various types of **wasted urban landscapes**. As a long time disc golfer and student of landscape architecture I am interested in how disc golf **subculture** and its **environment** interact in southern California and to what extent the concept of **play** fuels the growth of this unique **lifestyle sport**. Can disc golfers help reclaim Los Angeles region's post industrial waste landscapes?

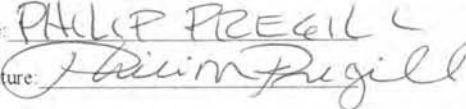
This is **confidential** study. At no time are you expected to give your name or reveal your identity directly. After the recorded interview I will ask for some very general information about yourself. This brief demographic survey is **voluntary** and you can choose not to answer any or all of the questions.

There is no compensation for participation but hopefully the interview process will help you understand better why you play disc golf and to enjoy your round! If you have any questions or wish to withdraw permission to use the words and ideas recorded in your interview for this study, contact Michael Plansky or Phil Pregill using the information below:

Michael Plansky, Primary Investigator
Master Landscape Architecture Candidate 2013
Department of Landscape Architecture
College of Environmental Design
California State Polytechnic University, Pomona
Phone: (909) 764-0939
email: mikeplansky@yahoo.com

name: **MICHAEL PLANSKY**
signature: 

Phillip Pregill, Primary Thesis Advisor
Professor, Department of Landscape Architecture
College of Environmental Design
California State Polytechnic University, Pomona
Office: Building 7 - 104E
Phone: (909) 869-4431
email: pnpregill@csupomona.edu

name: **PHILIP PREGILL**
signature: 

AUDIO RECORDING CONSENT _____ (INITIAL)

I understand the study as described above and agree to be digitally recorded for the purpose of furthering research and knowledge about disc golf subculture in southern California.

B: Interview questions & photographic prompts

(1) How were you introduced to disc golf?

[prompts] *Where was it? When? How long ago?*

(2) Why do you continue to play to this day?

[prompts] *Is that your primary reason? What else?*

(3) Why do you play this course?

[prompts] *what landscape features do you like here? Why? Park amenities? Interest in interpretive signage? What's bad about it?*

(4) Do you spend time in this park doing other activities in addition to disc golf?

[prompts] *What activities? How often? With Whom?*

(5) What other courses do you play, if any?

[prompts] *Why? What keeps you away from a course?*

(6) Do you ever change or modify the rules?

[prompts] *Invent new games? Play your own holes? How? Why?*

(7) Would you be open to/interested in playing courses designed on unconventional urban landscapes?

[prompts] *Subjects shown the photographs on the following pages in succession. Simple affirmative or negative responses recorded, but subjects allowed to expand on or comment on each setting as a possible site for a disc golf course if they choose to voluntarily, as they are shown each photograph.*



FREEWAY LEFTOVER LAND Photo: Unknown.
accessed 02/14/12: <<http://bbbandm.les.wordpress.com/2011/05/steel-2796.jpg>>



ABANDONED RAILROAD photo by: Unknown.
accessed 02/14/13: <<http://momvoyage.blogspot.com/2011/09/industrial-landscapes.html>>



GROUNDWATER RECHARGE BASIN/FLOOD CONTROL
(photo by M. Plansky 2012)



UTILITY CORRIDOR (photo by M. Plansky 2012)



URBAN WASH (photo by Clark 2010)

accessed 02/14/12: <<http://www.ickr.com/photos/markwclarkphoto/4377282852/>>



ABANDONED FACTORY(photo by Bora Aliaj 2012)

accessed 02/14/12: <<http://architectureandcity.wordpress.com/kombinati-the-beauty-of-a-decaying-state/former-textile-factory-bora-aliaj/>>



FACTORY OUTSKIRTS (photo by: Pickersgill 2007)

accessed 02/14/12: <http://en.wikipedia.org/wiki/File:Post-industrial_landscape_-_geograph.org.uk_-_558887.jpg>

C: Demographic survey

Plansky_Disc_Golf_Thesis_Study_2013_CPP [For Primary Investigator Use ONLY]

SITE/PARTICIPANT CODE: _____

Demographic Profile Sheet

Gender: M F

Ethnicity: *SELF IDENTIFY*

Caucasian Latino African Asian Other _____

Age: 18-25 26-35 36-45 46-55 55-65 65+

City of Residence: _____ Travel Mode (to course): _____

Highest Education: _____

Income/yr: \$0-20K | \$20-40K | \$40-60K | \$60K-\$80K | \$80K +

Marital Status: Single Married Divorced

Professional Disc Golf Association (PDGA) Member? Yes No

D: Disc golf abridged glossary of terms

ACE	hole-in-one: very difficult but much more common than in ball golf
ACE POOL	a pool of money diverted from a percentage of entry fees from tournaments or WEEKLIES which accrues until somebody gets an ACE during the course of such an event, winning the whole sum
AWAY PLAYER	for etiquette & flow: player furthest from target plays their LIE first
ANHYZER	for RHBH players, a shot sent to the left which angles back right
BEST DISC	a doubles game where both teammates throw off the tee and from each subsequent lie, but only the best of the two shots is selected to be utilized for the next shot
BAG-TAG	system where club members can challenge a player with higher rank
BAGGER	short for 'sandbagger': one who plays competitively below their ability
BASKET	target designed to receive object (disc) to complete a hole/ POLE-HOLE
BIRDIE	1-under PAR; ie, taking 2 strokes to complete a PAR 3, etc.
BURN	a worn-out STABLE disc, that becomes UNDERSTABLE
CALI	when a group that has an odd number of players wants to play doubles the single player (cali-player) gets two-shots per STROKE
CAMBODI	a strong HYZER (steep angle)
CANDY PLASTIC	a disc with harder, more resilient plastic that 'shines like candy'
CARAVANS	arranged excursions where a group of disc golfers carpool to a distant course or series of courses over one or several days
CASUAL WATER	shallow and/or temporary pools of water not considered O.B.
CHING	the 'blissful' sound made when a golfer completes a hole: 'hitting chain'
CHUCKERS	disrespectful golfers who throw without checking for bystanders

COURSE STEWARD	active member of a local club or informal disc golf community who regularly takes on roles as ambassador, organizer of events, and/or course maintenance, among other activities
CTP	stands for Closest To the PIN – In tournaments sometimes a hole is designated as the CTP hole such that the golfer with the closest measured drive to the target off the tee during the tournament is awarded a prize – also, a game where only one throw is executed per hole off each tee and CTPs are tallied over the round
DEUCE	taking 2-strokes to complete a PAR 3
DISC	also FRISBEE: plate shaped object designed to be thrown through the air – Includes DRIVER, MID RANGE and PUTTER for different shots
DISK GOLF	common misspelling of 'disc golf'
DGC	common acronym on monikers, logos and labels for “disc golf club”, usually following the club name, such as “Oak Grove DGC” – Also can stand for “Disc Golf Course”
DOINK	opposite of CHING: hitting BASKET too low or high, deflecting away
DRIVER	sharp edged DISC designed for long distance from the tee or FAIRWAY
DROT	acronym for 'disc resting on top' of basket, does not count as HOLEOUT
ESCAPE SHOT	using skill and guile to surmount a tough LIE out of/around HAZARD(S)
FAIRWAY	the generally open space between the tee area and the target
FLEXSHOT	for RHBH: a shot that begins left as an ANHYZER, comes across to the right then fades left at the finish – also S-CURVE.
FLICK	a supinated (palm up) throw using a lot of wrist action to the outside of the body – also 'forehand': as in RHFH and LHFH
FLIPPY	a disc or throw thereof, that is UNDERSTABLE
FRISBEE	name patented by Wham-O Inc., for their flying disc products
FROLF	a slang conjunction of FRISBEE and 'golf', synonymous with 'disc golf'
GAMER	an expert and/or competitive disc golfer

GIMME	when a LIE is close enough to the target that it is not expected that the owner PUTT it in: depends on skill level, competitiveness, etiquette – see also PICKUP
G.E.D.	Acronym for 'good enough drive': emphasizes importance of 2 nd shot
HANDICAP	a strategy to level the playing field between players of different skill levels by way of awarding STROKES, changing PAR or disadvantaging the more skilled player(s) in some fashion
HAZARD	Any obstacle in the landscape that penalizes or challenges the golfer to change or adjust their shot from a particular LIE: trees, bushes, gulleys, rocks, buildings, poles, water bodies, elevation changes, etc...
HELIX	see FLEXSHOT and S-CURVE
HERO	an 'all or nothing' throw
HIGH SPEED TURN	the early flight of an UNDERSTABLE disc
HOLEOUT	completing a hole: putting DISC into target, or by conceding a GIMME
HORK	dramatically exaggerated angle of flight – HYZER or ANHYZER –
HOT STAMP	logo or graphic printed on the top/dome of a disc
HYZER	a RHBH throw which starts right and finishes left
LAYUP	a throw from the fairway or fringe of the target area intended to land the disc close enough to the BASKET to be in close putting range
LOW SPEED FADE	for RHBH: natural tendency of a disc to turn left at end of flight
LHBH	a Left Hand Back Hand throw
LHFH	a Left Hand Fore Hand throw
LIE	where the disc comes to rest: golfer must throw again from same location such that one foot is positioned at that location and the other at or behind an imaginary perpendicular line between the lie and the target – each throw counts as one STROKE. If a lie is located O.B. or such that it cannot be played, eg: TREE'D, golfer takes a STROKE

MECCA	a geographic region in which several well regarded disc golf courses are clustered together, therefore warranting significant travel from outsiders to spend time in the area to experience the range of offerings
MID RANGE	a disc designed to balance control and distance
MANDO	short for 'mandatory' referring to a required flight path between the tee area and the target, often marked by tape on trees, for safety, and/or to facilitate course flow, and/or to create challenge
MIXED TEES	courses which incorporate two or more kinds of tee areas: natural, concrete pad, shared path, rubber, turf, gravel, etc..
MULLIGAN	term borrowed from 'ball golf' refers to a courtesy rule during casual play where a golfer is allowed to repeat a poor STROKE without penalty – usually agreed upon before round begins – weaker players may be offered mulligan(s) to be used by their own discretion as needed
NATURAL	when playing in a game where MULLIGANS are permitted once per hole (CALI), a NATURAL is a BIRDIE or a PAR achieved without using a MULLIGAN
O.B.	out-of-bounds: usually designated on course maps, by tournament directors, or agreed upon by a group of golfers
OBJECT COURSE	a course layout designating objects such as trees, rocks or poles as targets as an alternative to POLE-HOLES or TONE-POLES
PAR	the number of throws or STROKES an expert player is expected to need to complete a hole: usually 3, but occasionally 4 or 5
PICKUP	when a LIE is close enough to the target that it is not expected that the owner PUTT it in: depends on skill level, competitiveness, etiquette – see also GIMME
PIN-POSITION	a steel cylinder or 'sleeve' anchored in the ground by cement designed to support and lock the POLE-HOLE into place – many courses offer several positions for each hole and COURSE STEWARDS change them periodically to create variation in play and to rest portions of land
PLAY-THROUGH	a courtesy offered to a faster moving and/or smaller group of golfers from behind in the course route to skip ahead to the next hole

POLE-HOLE	also 'disc golf basket': the iconic disc catching target patented by Ed Headrick made of a free standing pole and an assembly of hanging chains above a squat cylindrical basket, which popularized disc golf
PUTTER	disc with a flat edge designed to fly straight for short distances
RABBIT	throw that finds the bushes: may cause a rabbit to dart out in the open
RHBH	Right Hand Back Hand
RHFH	Right Hand Fore Hand
ROLLER	a throw meant to roll on edge, along the ground, after initial flight
SAFARI	when a group of golfers takes turns 'calling' holes by choosing tee areas not officially designated, to drive towards selected baskets or targets
SCISSOR STEP	a crossover step taken during the run-up for a drive or long approach
S-CURVE	for LHBH: a shot that begins left as an ANHYZER, comes across to the right then fades left at the finish. Also FLEXSHOT
SIGNATURE HOLE	generally to most memorable hole on a course in play and/or visual quality
SNAP	the effect of the release motion the arm creates, imparting a burst of spin, propelling the disc forward: 'ripped' out of the hand by force of the arm swing
SPIT OUT	a shot that enters the chains but does not fall into the basket, by either passing through or getting knocked out of the cylinder by chain action
STABLE	a disc or throw for RHBH that holds left
STAR FRAME	when everyone in a group of 3 or more golfers gets a BIRDIE/DEUCE
STROKE	the initial drive and each throw thereafter from subsequent LIEs each count as a stroke – O.B. and TREE'd throws count as additional strokes
TACO	a disc thrown into an object at high speed, bent into a taco shape
THUMBER	overhead throw propelled off the thumb from disc's rim (TOMAHAWK)
TOMAHAWK	an overhead throw, sometimes in the form of a THUMBER

TONE POLE	a target design that does not catch the disc but instead makes a resonant sound upon impact to indicate completion of a hole
TREE'D	throw that gets caught high in a tree, costing the thrower a STROKE
UNDERSTABLE	tendency of a disc to remain straight in flight
WEEKLIES	informal competitions arranged by local clubs, sometimes for money
WING	side of a disc opposite the player's hand (GRIP), or 'forward' side
WOLF	a 'best shot' game, usually played with 5 players, often for money: similar to the basketball game 'horse' or 'skins' in ball golf
WORM BURNER	throw released lower than intended, hugging or hitting the ground
X-STEP	see SCISSOR STEP

Sources include interview transcriptions, participant observation and the web:

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<http://www.imagineauburn.com/golf-disc-terms.htm> [May 12, 2013]

Innova Disc Golf. 2013. Glossary of Terms.
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E: Interview transcriptions

Mountain Pride/TYP IV/new, urban-center	250-270
La Mirada/TYP III/old, urban-center	271-296
Yucaipa/TYP II/new, urban-edge	297-321
Oak Grove/TYP I/old, urban-edge	322-345

E: Interview transcriptions

MOUNTAIN PRIDE | IV (Murrieta, CA)

Saturday February 23 & Sunday February 24, 2013

weather: (Clear and warm, calm in the morning, increasing afternoon breeze, both days)

SUBJECT IV-A | Demographic Data

Gender: M

Ethnicity: Latino

Age: 18-25

City of residence: Corona (32.1 miles)

Travel Mode: Car

Highest Education: some college

Income: 20-40K

Marital Status: single

PDGA Member?: no, but MDGC member



Interview Transcription IV-A | time: 9:40am (Sat.) location: bench near tee 1/long

(1) How were you introduced to Disc Golf?

Both of my brothers, uh, two of my brothers which lived in Idaho. Disc golf's really big out there, within 30 miles, there's a bunch. REALLY? BIG OUT THERE? Yeah, They've got a lot of courses. Within 30 miles we've got a bunch. HOW LONG AGO WAS THIS? About a year ago.

(2) Why do you continue to play to this day?

I mean it's peaceful, the people are nice, really friendly, everybody's helpful. The courses (IN IDAHO), they're wooded, but they're all naturistic, you know? IN IDAHO? Yeah and here in general, here in Murrieta; there's La Mirada, there's Corona, there's San Diego, all the counties, mostly, all the counties have courses now.

(3) Why do you play this course?

It's nearby, it's only about, you know, 25 miles from my house, and it's nice, it's heavily wooded, it has a good scene, you know, good park, good people. NO CONFLICTS WITH OTHER USERS? No, (indiscernible interjection from another disc golfer listening).

(4) Do you spend time in this park doing other activities in addition to your round of disc golf?

Well, I come here about twice a week; for about four hours at a time, you know... JUST FOR DISC GOLF? just for disc golf; just relax here, have a "good one"... sometimes stay and socialize afterwards actually, then maybe go out to eat...maybe come back for a second round...so (LOOKS AROUND) we just finished eating, and this will be our second round. IS THIS THE SPOT WHERE YOU USUALLY MEET? (bench near hole 1).... Not really, this is next to hole 1, but if there are people playing, I mean, we just meet up anywhere.

SUBJECT IV-B | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 36-45
City of residence: Murrieta (3 miles)
Travel Mode: Car
Highest Education: some college
Income: 20-40K
Marital Status: single
PDGA Member?: no



Recorded Interview Transcription IV-B | time: 10:05a (Sat.) location: bench near tee 1/long

- (1) How were you introduced to Disc Golf?
Back in Tennessee, my friends took me out play at a local course. HOW LONG AGO? Let's see, that was about 6 years ago.
- (2) Why do you continue to play to this day?
I just thought super cool the way I could make the disc fly. And it was just a great way to get away from the city, you know, the sort of grind of regular life.... a different atmosphere
- (3) Why do you play this course?
This course is great because... well because it close, but now that they've completed the new layout of 18 holes down the valley, it creates a great feel. HOW? You're just down and away from the regular park for while, there's different shots around trees, some hills, some changing views, I mean.....interesting slope shots WHAT ABOUT THE PEOPLE? Everyone's cool. Disc golfers are always cool. Sometimes it gets crowded at the tees, but it always works out. Yeah there's almost always a good vibe.... I join groups all the time, whether I've met 'em or not. People are just stoked to be able to play a new layout! Maybe it'll get too crowded.....can't have too many courses.
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Yeah, I like to just walk somewhere into the middle of the course and sit down. Enjoy the sun, think about shit, be quiet, just look at the trees maybe, maybe notice some small animals. Then I might start skipping around playing some holes, or just working on shots from certain parts of holes.
- (5) Do you play other courses?
Yeah, I go down to Kit Carson or play the local 9-hole just to mix it up, I'd like to play more courses but the distance thing sucks. There should be more courses around here.I lived in the state park where Casitas (highly rated disc golf course in Venutra County) while my buddy was working there and biked to the course. You've got to check out that one, its basically a fantasy land for disc golf.... big, wide open hills, forest, water, steep hills... so there's crazy downhills...it challenges you.... and kicks your but..... but mostly its just beautiful to be out there. INTERPRETIVE SIGNAGE? O hell yeah! That. For sure. Actually, back home we found out about this ...special frog (that my friend was studying) and got the city to protect it.... (goes on about this)..... Yeah, the more I can, the more people can see stuff about the plants or the water or the animal... yeah, for sure that's great. I'd love to see that!

- (6) Do you ever change or modify the rules?

Pretty much if someone like my boss who has never played before (HE IS WAITING FOR HIM TO ARRIVE TO INTRODUCE HIM TO DISC GOLF) I just let em play and not give too many pointers, just try to let him figure it out for himself, and then if he has any questions I try to help him but, personally it's hard to play and enjoy it if someone's trying to teach you at the same time and you're frustrated, and you're changing your game constantly, you kinda gotta get a happy medium where you're at and then work on that.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Most definitely, and the more um, open its, the farther away it is from other activities, its, say you pull off the 15 somewhere on a Mountainside, I'd play it. If it was in town, downtown, by a park, and there's a lot of activity, I may not, I'm not, I don't like being enclosed to the point where you're constantly looking out for other people. When I go out to play I wanna kinda like get away from a lot of activity.....*

Abandoned railroad *Absolutely*

Groundwater Recharge Basin *Yeah, exactly, perfect*

Utility Corridor *I've seen a course built on one of those. WHERE? Tennessee; Oak Ridge up by the mountains they have power stations, up in the Appalachians, Smoky Mountains Parkway, up in that area, and so in courses on the edge of a park they use that clearance because it's mowed and maintained and its a long throw and open, and I've, every time I've seen a course near those they've utilized the power, the mowing area underneath the power lines to their advantage.*

Urban Wash *Oh yeah (enthusiastically)*

Abandoned Factory *That would be kickass.*

Factory Outskirts *Even better, I think if you had like 9 outside it, in the open, and then the second 9 inside.....that would be awesome.*

SUBJECT IV-C | Demographic Data

Gender: M
Ethnicity: Latino (Hispanic)
Age: 36-45
City of residence: Mira Loma (40.1 miles)
Travel Mode: Car
Highest Education: some college
Income: 20-40K
Marital Status: single
PDGA Member?: no



Recorded *Interview Transcription IV-C* | time: 10:50a (Sat.) location: bench near tee 1/long

- (1) How were you introduced to Disc Golf?
I moved up north to Eugene, Oregon, it's big up there, and, uh, just not having anything to do. And having friends out there who played. I just went with them one day and started playing. HOW LONG AGO? 3 years.
- (2) Why do you continue to play to this day?
It's a cool, active hobby, instead of playing video games, it gets you outside. I get out, walk around, some courses have hills..... well, most courses have hills, and its good just walking, you know, good exercise, you always meet cool people....the people who are normally playing disc golf are real chill, real nice, helpful, so you know it's never a bad experience (abruptly cuts himself short)..unless you're playing a bad game, other than that, its always fun DOES A BAD GAME GET YOU TO COME BACK OUT AGAIN? Yeah. Also, one of the big things is when you find your groove, you get some throws that just feel nice, its just that feeling of getting that good throw that brings me back. DOES THE ELEVATION MAKE IT MORE INTERESTING? Yeah.
- (3) Why do you play this course?
I'm actually still kinda neutral on this course, you know, its my first time playing it, it's got some cool you know, jogs around different obstacles. The only thing I would say I don't like about this course is the amount of brush, dead stuff, but if you're good enough where you are not throwing into that stuff then you don't have to worry about it, but the positives about this place; it's my first time here and I've already made friends with three of the different members, and everyone seems real friendly, and you know, I don't expect less of anywhere else.
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Well, I guess no, you know, its my first time, but probably am just interested in the disc golf
- (5) Do you play other courses?
Sure, I play courses like Prado because they are close, I started playing Glen Helen and the people are cool there, you know really into disc golf....Sometimes I'll travel to La Mirada or Oak Grove for some variety, Yucaipa is cool, but you have pay to get in. I like exploring, finding new places to play.
- (6) Do you ever change or modify the rules?
Pretty much play by rules. MAKE UP NEW GAMES OR PLAY DIFFERENT ROUTES? Well, yeah sometimes it's fun to make up doubles games when you are introducing someone to the

game or your are playing with someone who is just learning.... you know, "Best Disc" or adjusting the game here and there so the rules don't seem too strict...but when I'm playing with good gamers its better to stick tighter to the rules, I think, yeah.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Yeah sure.*

Abandoned railroad *Well, not too exciting, but sure why not?*

Groundwater Recharge Basin *Yeah, that's cool.... interesting terrain, I mean that's what's cool is you can make good holes almost anywhere.*

Utility Corridor *Oh sure, that's like San Marcos.*

Urban Wash *For Sure*

Abandoned Factory *Well, Yeah! You could get really creative with that.*

Factory Outskirts *Probably not my preference to be looking at that, but sure, yeah. I wouldn't really have a problem with that.*

SUBJECT IV-D | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 46-55
City of residence: Temecula (8.4 miles)
Travel Mode: Car
Highest Education: College Grad
Income: 80K +
Marital Status: Married
PDGA Member?: Yes



Recorded *Interview Transcription IV-E* | time: 1:15p (Sat.) location: bench near tee 1/long

- (1) How were you introduced to Disc Golf?
It was about 20 years ago at Pasadena, Oak Grove. I was already really into frisbee, disc, and I just went out there myself to try it, had just heard about it.
- (2) Why do you continue to play to this day?
YOU WERE HOOKED RIGHT AWAY? Oh yeah, just right away it was just like, this challenge. I could see it. I could see how you could learn to control the flight of the disc. MORE OF A PERSONAL CHALLENGE THAN COMPETITIVE WITH OTHERS? At first, yeah, but it really helps to test your skill, get pushed by other people, who, you learn from. Different ways to throw, different shots....
- (3) Why do you play this course?
Well, since they turned it into 18 I really like it. It was
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
No,
- (5) Do you play other courses?
Sure. I play Kit Carson a lot. Sometimes go down to Balboa (Morley Field, San Diego)
- (6) Do you ever change or modify the rules?
No
- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Yeah.*

Abandoned railroad *Um, maybe, not ideal.*

Groundwater Recharge Basin *Sure, yeah, I like that.*

Utility Corridor *Could work, yeah.*

Urban Wash *Definitely, yeah.*

Abandoned Factory *Mmmm, yeah, uh huh.*

Factory Outskirts *Not the best, but I wouldn't mind.*

SUBJECT IV-E | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 36-45
City of residence: Murrieta (2 mi.)
Travel Mode: Car
Highest Education: some college
Income: 20-40K
Marital Status: single
PDGA Member?: no



Recorded *Interview Transcription IV-F* | time: 2:35p (Sat.) location: bench near tee 1/long

- (1) How were you introduced to Disc Golf?
As a kid my father threw, I was back home in Colorado... my father had been playing for years and years. HOW LONG AGO? 13 years.
- (2) Why do you continue to play to this day?
Because I love the challenge, the camaraderie of coming out with friends, having a good time, and then also I'm always up for a challenge. I'm always playing against people. MORE PERSONAL CHALLENGE OR TO COMPETE WITH OTHERS? No, yeah, I have a good time with my friends, but yeah I, it's more of a challenge for myself to see how, if I can get better or see if can beat myself.
- (3) Why do you play this course?
Because the other course (Rancho Acacias) is 9 and this is 18 (very quick to respond) WHAT LANDSCAPE FEATURES DO YOU PREFER? I like... I like the elevation change, that that's definitely different from what I'm used to playing, playing the elevation change is cool, I also like, uh, shootin acrossed, I like what they did with that one pin (basket) down there where its like 6 feet in the air, its just, its different than most courses. APPRECIATE LONG VIEWS? Uh, you know I actually never though about the views on the outside, or uh, er, but I definitely appreciate all of that. INTERPRETIVE SIGNAGE? Mmmm, no, not me. It's like.... I'm not going to the botanical garden to play golf....
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Naw.
- (5) Do you play other courses?
(Like I said) I like throwing the 18 (opposed to 9), but I do like playing "Acacia" as well... Its a pretty nice course, these are the only two I've played out here so far, I don't really know of any other ones, but I like to switch it up...you know, not stay on the same course all the time.
- (6) Do you ever change or modify the rules?
As a matter of fact we keep it super strict. We play everything as a par 3 and no mulligans. YOU DON'T MAKE UP RULES OR CHANGE THE WAY THE HOLES ARE PLAYED?
Nope (abruptly).....Maybe the only thing is, if you land on top of the basket, instead of counting another stroke, we count that as "in".
- (7) Would you be open to/interested in playing courses designed on unconventional

landscapes? Such as: Absolutely! (with a low fading chuckle)

Freeway leftover land Yeah, definitely, I like that.

Abandoned railroad *Yeah (quick and affirmative)*

Groundwater Recharge Basin Oh yeah, nice hazards, I like it, definitely.

Utility Corridor *Yeah, as long as I can't lose my disc in too many places. WHAT ABOUT THE POLES/WIRES? No that's fine, as long as I'm not flying a parachute.*

Urban Wash *Definitely.*

Abandoned Factory That would be really cool! WHY? I don't know, um, I don't know (inquisitive tone) um, different, it would be real different.

Factory Outskirts *Yeah, absolutely. INDUSTRIAL VIEW? I'm not worried about that.*

SUBJECT IV-F | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 26-35
City of residence: Lake Elsinore (10.8 miles)
Travel Mode: Car
Highest Education: High School
Income: 0-20K
Marital Status: single
PDGA Member?: no



Recorded *Interview Transcription IV-G* | time: 3:40p (Sat.) location: grass under tree near tee 1/short

- (1) How were you introduced to Disc Golf?
My dad showed me how to play at Oak Grove when I was a kid. He was into it back then, but he doesn't play anymore. HOW LONG AGO? Oh, uh, 15, yeah maybe years now.
- (2) Why do you continue to play to this day?
DID YOU GET HOOKED AFTER YOUR DAD SHOWED YOU? Well, not really, I thought it was cool but I was into other sports and stuff then.... I picked it back up in college because it was cheap, and it was close... Once I started throwing some more I got into it and told my friends about, got em hooked I guess. It became pretty competitive.....see who could get low scores consistently
- (3) Why do you play this course?
Its close to where I live now and its got 18 holes now. Its pretty challenging... something different.... down in that...the woods DOWN IN THE WASH? Yeah, it feels like when I was a kid and would just go play off in the creek and stuff, see what I could find? NOSTALGIA? Yep. WHAT ELSE? Always good people here... good attitudes.... and the the hole patterns. They keep the variety going – You get to use, you get to choose or try different shots, you know, the way the trees or hills make you take different flight paths....
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Um, no, just for disc golf.
- (5) Do you play other courses?
I like to try other courses... Let's see, La Mirada is cool because it has 2 courses; makes it worth the trip. DO YOU LIKE THE VERY GRASSY PARK SETTING THERE? Yeah its a trip, with the rolling hills and the perfect grass...mix of trees, but there can be lots of people and people who are not aware of disc golfers. So, it can mess up my flow.... I guess I prefer more rustic settings like here. WHY? Hmm, I think like I said, it makes me feel like I'm getting away from things; getting into my own, um, flow, yeah.
- (6) Do you ever change or modify the rules?
No. DO YOU EVER MAKE UP NEW GAMES OR CHANGE THE COURSE? Uh, I suppose. Like Acacia or I've played that 9 holer in Redlands – Those are cool to make your holes, but I see those more like just practice courses anyway.
- (7) Would you be open to/interested in playing courses designed on unconventional

landscapes? Such as:

Freeway leftover land *Yeah man, wherever you can put a course. You know that's not really ideal but I'd play there.*

Abandoned railroad *Uh, sure, that's cool.*

Groundwater Recharge Basin *That's interesting, Yeah I'd like that.*

Utility Corridor *Thats OK.*

Urban Wash *Oh yeah, no problem.*

Abandoned Factory *Uh-huh, that could be very good. You could throw from out of those windows, around, through, yeah I'd like to see that!*

Factory Outskirts *Having that view wouldn't be the best, but yeah.*

SUBJECT IV-G | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 26-35
City of residence: Wildomar (6 miles)
Travel Mode: Car
Highest Education: some college
Income: 40-60K
Marital Status: married
PDGA Member?: no (used to be)



Recorded *Interview* *Transcription IV-H* | time: 10:15a (Sun.) location: bench near tee 1/long

- (1) How were you introduced to Disc Golf?
Friends. WHERE AND WHEN? About 3 years ago down in San Diego, Morley Field.
- (2) Why do you continue to play to this day?
It was something to do. Got me outside and gave me something to work on. It was nice to see progress in my game... I got decent quick. SOCIAL? Oh yeah, for sure.... you know drink some beers, talk shop and play throw discs. COMPETITIVE? At times it can get,,,,, realllly competitive, but no one seems to hold a grudge too long....hey its fun to piss off your friends some times....
- (3) Why do you play this course?
Definitely the closeness to home. Um, the way its set up now uses the area really well; lots of different ways to play holes.... having the long and short tees; different angles; you don't have to worry about hitting people in a park and... open shots and trees shots; a little elevation. I like that.
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
No, just come to play a couple of rounds.
- (5) Do you play other courses?
Sometimes I make it down to Kit Carson. WHY DO LIKE TO PLAY THERE? It's got a nice balance of rustic and open, parky, nice course; some interesting challenges. I'd like to play more courses, but, we need more around here.
- (6) Do you ever change or modify the rules?
No, not really. MAKE UP GAMES OR PLAY ALTERNATE ROUTES? No....no.
- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Yeah sure, that could..... use those columns as a mando (mandatory route), that would be cool. Yeah.*

Abandoned railroad *Anywhere. Yeah.*

Groundwater Recharge Basin *Yeah, sort of rustic, some water. Don't want too much water, but yeah.*

Utility Corridor *That's just like San Marcos, right along the power line. I'd play that.*

Urban Wash *Yep, sure.*

Abandoned Factory *....maybe not. no.*

Factory Outskirts *Sure. BOTHERED BY THE VIEW? No, thats no big deal, as long as the course is good, I'd play it.*

SUBJECT IV-H | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 36-45
City of residence: Murrieta (1 miles)
Travel Mode: Car
Highest Education: Bachelors
Income: 20-40K
Marital Status: single
PDGA Member?: no – they don't help to build courses



Recorded *Interview Transcription IV-I* | time: 11:10a (Sun.) location: bench near tee 1/long

- (1) How were you introduced to Disc Golf?
Bijou Park up in Tahoe. OH YEAH, THAT'S THE FIRST COURSE I PLAYED ALSO, WHAT YEAR? 1996.(17 years)
- (2) Why do you continue to play to this day?
It was just something fun to do in the woods; hang out with your friends mostly, be a little bit competitive; create a little fodder for trash-talking..... IMPROVING YOUR GAME? Yeah, I got into the dynamics of how the disc flew right away... still working on it!
- (3) Why do you play this course?
Now I'm mostly into the community of it since I'm so involved (DESIGNED NEW LAYOUT AND ORGANIZES CLUB EVENTS). Its great to see people enjoying the holes... hearing who likes what; seeing people check out the course from other places. I think we made the most of the elevation. INTERPRETIVE SIGNS? Sure, we've had all kinds of wildlife sightings here already; hawks, snakes, lots of birds.... The City won't pay for it.
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Well no. I mean I spend a lot of time here working on the course, organizing.
- (5) Do you play other courses?
I've played a lot of courses but mostly here lately. I like Yucaipa WHY? It makes good use of the elevation there. Beautiful setting, but it can be a little overcrowded with people walking, picnicking, fishing.... You need some patience, and it costs money to park.
- (6) Do you ever change or modify the rules?
We like to set up weeklies and doubles events that get people involved, and starting our bag tags (casual daily competition to win tag numbers) – we're working out our local system.
- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Yeah, that would be different, why not.*

Abandoned railroad *Not too interesting.*

Groundwater Recharge Basin *Sure thats workable, Yeah.*

Utility Corridor *Yeah.*

Urban Wash *Of Course, same as here.*

Abandoned Factory *Yeah, it would eat up (ding, damage) discs like crazy!*

Factory Outskirts *Yeah. Why not?*

SUBJECT IV-I | Demographic Data

Gender: F
Ethnicity: Caucasian
Age: 26-35
City of residence: Aliso Viejo
Travel Mode: Car
Highest Education: AA degree
Income: 20-40K
Marital Status: single
PDGA Member?: no



Recorded *Interview Transcription IV-I* | time: 1:30p (Sun.) location: grass under tree near tee 1/short

- (1) How were you introduced to Disc Golf?
Him (looks over at her boyfriend). WHERE? Uh, yeah, it was Huntington right? Yeah Huntington was the first time I tried it. He was trying to get me out there for a while and couldn't stop talking about disc golf – played Huntington after work everyday, cuz it was close to where he worked – so I saw it as a way to git some quality time with my man. (2yr)
- (2) Why do you continue to play to this day?
You know, at first it was just cool, basically just cool to walk the course and watch his throws and other people – so many people into it there – I thought it was interesting. I mean would play, you throw it 7 times to get it in, but I didn't care, it was kind of like having a purpose, a reason to walk and talk – but I'm actually starting to get it now and sometimes, every once in while, I get a bitchin throw, or, put in a long shot and that brings me back, back for more – I think my muscles are learning? – but yeah mostly to do something cool and different together.
- (3) Why do you play this course?
Well, as you know, this is our first round here. We are starting to check out courses in Southern California because Orange County doesn't have much – some weird small courses, but.... We like to look at [dgcourseview\(.com\)](http://dgcourseview.com) and plan little adventures. This course had good reviews. WHAT DID YOU THINK? It's great, it's like, uh, mini-adventure, ...you go down into creek, and most of the holes are different (long pause) I like the way the views keep changing – and it feels uh, sorta wild which is cool, but then this park part. Buncha nice people too! Was surprised to see so many groups down here. We'll be back. Don't you think? (to boyfriend)
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Doesn't apply
- (5) Do you play other courses?
So, yeah we've played La Mirada, the one in Pasadena, the first one – Balboa Park down in San Diego – I really liked that one – I guess I like busy courses – hmm, although that one was a bit too busy, maybe – but yeah, I like people watching, watching different people throw – But, um, the tree different kinds of trees and rolling hills... just makes it a nice walk, and then you're in Balboa Park, so there's lots more to do after if you want.

INTERPRETIVE SIGNAGE? Hell yah, why not? Might learn something. I don't know anything about trees.

- (6) **Do you ever change or modify the rules?**

Yep (looks at boyfriend). I change the rules all the time, LIKE WHAT? Well, I make it so we're even – even though he's, he can throw a lot further, so I make him throw left-handed, or make him play holes as par 2, or make him close his eyes. It's fun!....he's cool with it – helps to keep the conversation going...

- (7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land *Let's go....Yeah I want to play there.*

Abandoned railroad *Hmmm, maybe. Maybe not, I mean I'm down for putting baskets wherever, but that doesn't look like my first choice.*

Groundwater Recharge Basin *Yeah, sure.*

Utility Corridor *I like the open views. WIRES/POLES? No, that doesn't matter, maybe you could use them in the course, throw through them?*

Urban Wash *Well, yeah, same idea as here.*

Abandoned Factory *(laughs) Probably not. Maybe I'd try it, but, naw.*

Factory Outskirts *That doesn't bother me, I'd go play there.*

SUBJECT IV-J | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 55-65
City of residence: Escondido
Travel Mode: Car
Highest Education: Bachelors
Income: 80K +
Marital Status: single
PDGA Member?: no



Recorded *Interview Transcription IV-J* | time: 1:50p (Sun.) location: grass under tree near tee 1/short

- (1) **How were you introduced to Disc Golf?**
Oak Grove – I played there back in the late '70s. I was living in Pasadena back then and my co-worker got me into it – actually started playing with regular frisbees – mm, I was already into chucking frisbees at the beach, doing a little freestyle – loved the way they flew, but once I played disc golf – that was more interesting.
- (2) **Why do you continue to play to this day?**
Yeah, I guess I got hooked because of the strategy and the competition – It was just a great, not just physical, but mental exercise, and competing with friends would make you better. SOCIAL? Yeah, you know, a little social-release from the work day – It's perfect.
- (3) **Why do you play this course?**
Because they changed the layout (laughs) – Yeah, before it was just a boring 9 hole, and too close to those homes (points). Now it's a real course... it's got pretty good variety of shots – that's what I look for – to be able to use different shots. But a little too much Disneyland WHAT?! Oh, like, uh, that basket up on the hay bale, the one in the tire – I hate that shit. It just makes it unnecessarily hard – hit that tire and it rolls 40 feet away, that's bullshit, you don't need that stuff, it's like miniature golf or something.
- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**
No.
- (5) **Do you play other courses?**
Yeah mostly Kit Carson because that's nearest home. WHAT DO YOU LIKE ABOUT IT? The variation, the trees, the pleasant walks – uh, it's open, then you get some trees, different shots, different views.
- (6) **Do you ever change or modify the rules?**
No (looks at friend who has been listening to the interview) well, sometimes we make up different places to tee from – Or throw at a different basket from a pad that was meant for something else.... but not much, only usually if we are tied at the end of the round and need a play-off hole or two to decide a winner – It's cool to play something different to decide it.
- (7) **Would you be open to/interested in playing courses designed on unconventional**

landscapes? Such as:

Freeway leftover land *Um, not really,*

Abandoned railroad *Yeah, that's all right, you might be able to make a good layout there --*

Groundwater Recharge Basin *.....a bit rocky, um, yeah sure, you could make that work.*

Utility Corridor *Yeah, once again, you could make that work, but those giant buzzing poles... not a priority.*

Urban Wash *Uh-huh. Those can work, sometimes, depends. But, yeah, mostly.*

Abandoned Factory *No. I mean, I want some nature; softer views.*

Factory Outskirts *Again, not ideal, but if the course was good, no big deal, but yeah, I'd rather not look at that stuff.*

SUBJECT IV-K | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 18-25
City of residence: Temecula
Travel Mode: Car
Highest Education: some college
Income: 20-40K
Marital Status: single
PDGA Member?: no



Recorded Interview Transcription IV-K | time: 5:00p (Sun.) location: bench near tee 1/short

- (1) How were you introduced to Disc Golf?
Some of my friends at college, community college – it was about a year ago – maybe a little more. WHERE? They took me to Prado. It was cool – nice park with a lake – and then you could drink beers there – So slinging discs through the air, going for those baskets, I thought it was so cool right away – I could throw it almost as far as my friends right away – that was cool. HOW LONG AGO? 3 years.
- (2) Why do you continue to play to this day?
I just keep meeting cool people; it's a great way to get competitive but still stay real friendly and uh, still relaxed, you know. But it's really individual, you know, I like that – I can always work on stuff, think about stuff.... even when I'm not at the course I'm thinking about shots I wanna do, better – But yeah, I also like to be able to impress people with what I can do or how fast I can learn.... and I like to see other discers do crazy shit too.... That just keeps me coming back mostly, yeah. I've got 5 aces (hole in ones) – I think that's kind of luck for someone who's only been playing a year, but I love it!
- (3) Why do you play this course?
Cuz I busted butt helping to build it. Yeah, it's so fun to play now – now that we've been working on – I've been thinking how it's gonna play, and now some great players are setting the mark, you know, for low score – that's cool to see. And especially the valley shots near the freeway I love (emphasis) those – lots of different shots – The hills and the trees.... And yeah, of course we have a short and a long tee box for every hole, almost, and so just by changing which tees you play from each round you can change your round, to practice different angles, shots.
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Yeah, well, to help on workdays, or do work on the course after a round. SOCIALIZE? Yeah.
- (5) Do you play other courses?
I love going to other course, I want to go to more – uh let's see, I just checked out Yucaipa recently and thought that was great.....It's a lot like this course I think – but more low ceiling shots – those are tough (emphasis) – I want to play – I want to just travel and play courses all over! WHAT ELSE AROUND HERE HAVE YOU PLAYED? Kit Carson, um, you know I go to Acacia (9 hole in Murrieta) and like to practice there, really just practice, but its cool.

That's about it. Oh yeah, and Oak Grove, the O.G.! Had to check that one out; I love those oak tree holes! Lot's of great courses, too far away...

(6) **Do you ever change or modify the rules?**

I stick pretty tight with the rules, play it straight. MAKE UP GAMES? Mm, not really, DOUBLES? Oh hell ya.(pause) I guess we kind of play with that a little sometimes. Oh, with my one friend, we will this way he likes to play where – now this isn't doubles but – like when you have 3 people in a group? Yeah, you make it so everyone gets basically one mulligan (re-do) per hole, but if you don't use it, you get what we call a 'natural'. A natural par, or a natural birdie, so you count your 'naturals'. So, if the score is tied at the end, you look at natural to see who wins – puts actually, a lot of strategy into the game, I love it.... but as far as PDGA rules, the way you have to play your lies and stuff, no we don't change that.

(7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land *Bleep yeah! That would rock.*

Abandoned railroad *That would be awesome – that would make a nice feel.*

Groundwater Recharge Basin *Yep, use the land! Across the water, yeah.*

Utility Corridor *That looks really good, yeah, um... you'd have to do a lot of clearing though!*

Urban Wash *MMM-hmm. You know it.*

Abandoned Factory *That, you could do all sorts of ways, you could come under, around, into the windows..... blast it back out. I'd be down, for sure. I want to help design that one.*

Factory Outskirts *No problem, I don't care about seeing factory stuff.*

LA MIRADA | III

Thursday, March 28 & Sunday, April 7

weather: clear to partly cloudy and warm, very light breeze, both days

SUBJECT III-A | Demographic Data

Gender: M

Ethnicity: Caucasian

Age: 26-35

City of residence: Long Beach (20.3 miles)

Travel Mode: Car

Highest Education: Bachelors

Income: 20-40K

Marital Status: single

PDGA Member?: yes



Recorded *Interview Transcription III-A* | time: 11:30a (Thurs) location: table outside pro shop

(1) How were you introduced to Disc Golf?

Through a friend, I was playing on the beach with a regular ultimate frisbee, just thought I'd be good at disc, never even played it before – That was probably about two years ago and I've never stopped playing since. First course I played was in Ojai, CA, its called Lake Casitas, Its a very nice course, very challenging, al ot of hills, a lot of mandatories, yeah, its just really cool –

(2) Why do you continue to play to this day?

Uh, just watching the disc fly through the air, having it rip off your fingers, using all the different shapes and weights, you know, its amazing – and its cheap, you don't have to go rent carts – parks, you get exercise wherever you - you know, its poor man's golf from my point of view – It definitely relieves the stress, it relieves stress just kind of gives me an escape from the rat race; my personal life, my work life, if I ever have problems with my family, I can just come out and do something I really (strong emphasis) love

(3) Why do you play this course?

Uh, I saw it on video quite a bit, you know watching pros on youtube an stuff like that. And um, I never got a chance to get down to this park of california, you know, I'm like two hours away in Ventura, so when I came down here I just wanted to try as many courses as I could – Fell in love with the terrain here, it's a beautiful park – Um, the ways the hills play, skill set you have to have to play a very good round here, it's very challenging – And just focus on myself, you know its something you can do as a team sport by playing doubles, but its something you can do by yourself; it's all the skills in you and how you want to distribute that –

(4) Do you spend time in this park doing other activities in addition to your round of disc golf?

Naw, specifically disc golf park

(5) Do you play other courses?

The other courses I've played down here are Sylmar, it's up in the Glendale area, Um Chavez Ridge Ravine, the one that's um, right next to the police academy, above Dodger Stadium; that one uh, that one is really tough only because you're playing around a mountain top and if, you know, one skip, one bad skip will send you 50 yards down the hill, so, so it kinda gets,,you get tired of playing one round of 18. When, at a course like this (La Mirada) you can play four rounds if you really wanted to. I like the difficulty you get with those steep courses, but I really like to rip those long drives; That place is more like a mid-range putter course, very tough though because you have a lot of trees – Uh, Verdugo Hills, ever since they put in the baskets with the golfers – that's like a par 3 golf course – that's really cool – cus all the greens are out-of-bounds so I really like that – Oh, yeah, Oak Grove, gotta play Oak Grove. WHY? Just because its the first disc golf park ever built – they've got the first disc golf basket there – iron maiden – I love taking a picture with it, showing people when we go. Um, I shot one of the best rounds of my life there, just like a couple of weeks ago – The signature hole where you shoot over the swamp; you have to park it up on the hillside – I just, yeah, I like the feel of the park, it's a very difficult course – I like the mountain views – met some of the locals there so they kind of give me the history (said in a matter-of-fact tone) of the park itself, so its pretty cool – That's definitely my favorite course, by far – I mean I really like Sylmar in some aspects, its small, I kinda don't like the layout, but you know, with Steve Rico there, they make me want to go back so I can maybe play a round with him someday (laughs) Then they do have a pro shop there – I like courses with pro shops – Um, Huntington Beach, also really great course – I was hoping maybe I could catch Paul Macbeth (World Champion) while he was here, but thats his home course, I'm happy that they post up people from their home area who were world champions, are world champions – I like the history behind that course – They charge like \$2, but I like courses that take the money and use it to maintain

(6) **Do you ever change or modify the rules?**

Naw, I try to play by the PDGA rules, just want to progress better and better, you know hopefully reach the top level and COMPETITIVE WITH OTHERS? I do get competitive with others depending on how they're shooting – Um,I definitely don't like to rub it in on people if they're not shooting well – But I uh, definitely try to shoot my best round every time I come out – I, I don't know, I definitely still like to joke around, have fun, it's a sport that anyone can play – so you know, I try to always keep it fun –

(7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land When I see that I just see the hole being straight through, back and under the bridge, there's just mandatories all the way under, make it a real difficult shot up to the point where you know, you can fade it out – I would definitely like to throw a course there.

Abandoned railroad *Uh, not so much, not so much as the uh, it just seems more wide open – I like courses where you have to throw trick shots through and stuff like that –*

Groundwater Recharge Basin That reminds me of how Oak Grove is, I think its 13 to 15 or something like that, it's kind of out in a field, you know there's a lot of big, tall dead bushes and rocks, and little rolling hills and that (pointing to picture) kind of reminds me of that river bottom feel – yeah, I would totally like to play there.

Utility Corridor *Yeah if we could fill it with disc golf course I would play it, but yeah, it just seems kind of flat to me, yeah, and not real challenging, the big telephone poles also wouldn't be my preference –*

Urban Wash Yeah, anywhere you can put a little pond or something, make the holes more challenging, that would be cool. I can see that.

Abandoned Factory (Laughing) That would be different to see an abandoned factory and then see disc golf cages, yeah... you know I saw a video one time of guys throwing out of, it was like a bridge, and you throw out the window of this bridge and it would land out in the middle of the field somewhere, that would be pretty cool. It was a permanent course, can't remember where it was, but it was really cool.

Factory Outskirts *No, not at all, if its all just open land then might as well put some use to it somewhere – Um, that kind of reminds me of the Pasadena course as well – Just kind of open...cus there is a factory (think he means JPL) ...I wouldn't mind playing it, as long as they had some tucked behind the hills, move baskets around corners and stuff --*

SUBJECT III-B | Demographic Data

Gender: M
Ethnicity: Latino
Age: 26-35
City of residence: Ontario (31.3 miles)
Travel Mode: Car
Highest Education: some college
Income: 20-40K
Marital Status: married
PDGA Member?: no



Recorded *Interview Transcription III-B* | time: 12:25p (Thurs) location: table outside pro shop

- (1) **How were you introduced to Disc Golf?**
Uh, from a couple of friends of mine that I grew up with, you know in the neighborhood. One of their Dad's showed me this course, this was my first time golfing, here at this course La Mirada. About 4 years ago.
- (2) **Why do you continue to play to this day?**
It was fun, cheap, you know, very inexpensive, especially when the economy went down and I lost a lot of hours at work. You know, couldn't afford anything expensive, so it was affordable. All you really had to pay for was a couple of frisbees and you know. WHAT ABOUT IT WAS FUN TO YOU? Being in a nice park, being able to uh, get my friends out that don't have jobs and get em into it. Its a good way to hang out with them and meet new people too. The longer I played the better I got and the more passionate I got about it. Now I bring my family out and now she (his wife) likes it and he's (points to his son) 10. He likes it a lot. He's pretty good for a 10 year old, yeah.
- (3) **Why do you play this course?**
Every hole is different. You know, it's not like repetitive. You know, you get some courses where hole 1 looks like hole 3. When you've got uphill, downhill, trees, wide open shots, some left hand turns, some right hand turns and some straight shots, and cus some courses just favor right hand throwers, as opposed to left hand throwers, or side-arms; different techniques? INTERPRETIVE SIGNAGE? Yeah, absolutely, I mean, i've been to some disc golf courses where I don't even know where I'm going – and some courses like Pasadena (Oak Grove) I'll be like this was the 1st disc golf course ever, over here they'll say like this hole was dedicated to Tim Selinski or you know, gives you a little bit of insight or the background, actually I am, I am interested in that. When I look at the T and it says "this is where you're going" and "this will be the next T box", its right over here, you know, for the next one, so you don't look lost, especially if its the first tim. DOES BETTER SIGNAGE LIKE THAT LEGITIMIZE THE SPORT? Yeah, more people would do it. We went to Redlands (Ford Park), and I don't know where I'm going. One of the locals was like "there's some pink flags over there" and I'm like "How am I supposed to know that, I've never been here before" - I had to like socialize with other people, you know "You know where hole one's at?" Its a good way to meet people but at the same time if no one's there, I don't know where I'm going, it's like "I thought we were going for that basket, not this one".
- (4) **Do you spend time in this park doing other activities in addition to your round of disc**

golf?

No, I don't do any other activities here, just disc golf.

(5) **Do you play other courses?**

Well, my home course is Prado, close to where I live in Ontario, uh, I love Prado, I'm always there. Like three, four times a week. We've got a pass (regional park, have to pay to park a car) – and we were there before they even had the opening of disc golf. So, and then uh, also was it, Glen Helen, and then Yucaipa – Those are good for a change in scenery you know, cus I'm always used to Prado, so kinda fun going new places. I love (emphatically) Yucaipa. That's one of my favorites. I like how they use the elevation, how wide open it is, you know you got the trees, like with Prado it's a different course in the summer as opposed to the winter, you know the trees have leaves, and then in the fall when the leaves drop. With change in season, where you would have to go around it, then in the fall you can go right through it.

(6) **Do you ever change or modify the rules?**

Yeah sometimes, like uh, instead of going for this basket, we'll uh, go to another basket but off of the same t-box. Like we go to Norco, Riverwalk, it's like a small 7-hole, yeah, and it's, they have the nicest t-boxes (emphasis) but I mean we go safari there (shoot at different baskets from same tee) Cus the 1st basket is only like 80 feet. They say its a par three and your like “whatever”. Get the most out of it. Play it a couple of times, different ways.

(7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land *Yeah, yeah (stronger affirmation)*

Abandoned railroad *Yeah.*

Groundwater Recharge Basin *Yeah, I like stuff like that, especially like this (points to portion of picture) cus it is a change of scenery and like that (water) would be out-of-bounds. You know what I mean, like we'd make that up, if you land in there its like out-of-bounds. , you know. Especially around Ontario, you know, power lines. Like, that's what we see when we drive, we'll just be driving and be like ah, you ever played in Vegas? NO. Oh no, they have this one called Picoly? And uh, I actually like it because you got housing tracks, looks like uh, association, with private walls and a bunch of trees as kind of a screen, so its cool for the course, the way it plays.*

Utility Corridor *Yeah.*

Urban Wash *I like it you know, I just don't like loosing my frisbee in water (laughs)*

Abandoned Factory *Probably, you know, if the drive's not horrible, you know, like I'm always down to travel -*

Factory Outskirts *Yeah, I love stuff like that, I mean, that's why I like LA because you overlook, like the one near Dodger Stadium, its almost like a little hike that takes you to a great city view.*

SUBJECT III-C | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 18-25
City of residence: La Mirada (less than one mile)
Travel Mode: Car
Highest Education: some college
Income: 0-20K
Marital Status: single
PDGA Member?: yes (few months)



Recorded *Interview Transcription III-C* | time: 1:10p (Th) location: *bleachers* outside pro shop

- (1) How were you introduced to Disc Golf?
Friends, friends got me into the sport, I have a few neighbors who live on my street who actually play too. WHERE? Here, La Mirada, I live about a block from here, so its my home course. I guess... about 5 years, really playing
- (2) Why do you continue to play to this day?
I, I mean I played varsity ball golf all through high school, so I already understood the concept, you know, when I first started playing it, but the thing that got me hooked was that its a lot cheaper and I think its more of a physical sport, because, uh, you use more of your muscles, and I like playing more physical sports, ball golf just got too boring for me. I think it's (disc golf) a more fun concept. It's different almost every time, I mean there's different conditions, the wind effects your disc more, you know, than ball golf. I think its really different; playing in the different conditions. Disc golf is just more fun all around.
- (3) Why do you play this course?
I like it because its got 2 courses and it gives you more variety. I mean you could play the "Lake Course" 3 days out of the week and then play the back course 4 days, but I mean you always have a different course to play and they always move the pin positions around, so it's almost a different course every week. INTERPRETIVE SIGNAGE? It would be cool to know about the history of the sport, you know. La Mirada was one of the very first places. So, if we could learn about the history of the sport it would get more people interested in playing. I think it will bring more people out to play and keep people coming back for more. Not so interested in the trees, the trees out here most of the people really know, its not like there's anything exotic about it. It would be cool if I was visiting a new course in maybe another part of the country.....
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Not so much, I used to – Me and my friends used to come to the lake and go fishing, but ever since I've been playing disc golf, its mainly for this.
- (5) Do you play other courses?
Um, I play El Dorado, down in Long Beach, and I like playing there because it's got I think a lot more tunnel shots through the trees. There's a lot more clustered trees so you have to have more precise shots and I think its a little more challenging, cus here at La Mirada

there's a lot of open shots, you know, you don't really have as much of a challenge there, it's the hole layouts that make this course challenging. Another course I play, it's called Liberty Park, it's in Cerritos, I mean it's a fun course, it's short, it's just a little 9 hole you know – there's nothing – I don't think there's anything over 200 feet at that course but I mean, we play a Safari layout – so I mean we play a full, long 18, which is pretty cool – We actually have tournaments over there every now and then, we have doubles and singles – It's a real open (not many obstacles or hazards) course.

(6) Do you ever change or modify the rules?

Yeah, I mean every short course that you go to, whether it be Liberty Park or Twaila Reid down in Buena Park, I mean we always play safari holes, we don't just play the set 9 holes that the city or whoever's running the park gives us, you know, we play extended 12 or 18 hole courses. We make up different holes every now and then just to switch it up but we stick to the safari layouts we made up and already agree on, you know.

(7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *That would be pretty cool (eagerness) If you could make like a tunnel shot going through the pillars, that would be pretty cool, have all of them almost be like mandatories – you know that would be pretty cool, you and then like maybe have the hole down in here (points to picture) It wouldn't bother me being around the freeway, I mean could just play with my Ipod headphones in*

Abandoned railroad *That would be a cool layout. I think there's a lot you could do with places like that. You know whether it would be like, taking like the intersection between these two rail tracks, and making this little bit (pointing to picture) an "island", you know, where its like mandatory to land in this area, that would be cool – there's so many different things you could do with different layouts – you know different landscape*

Groundwater Recharge Basin *It would definitely give you a lot of challenge, whether it be the water or the rocks, it would definitely make it challenging, I think it would be cool.*

Utility Corridor *That, that I mean, it definitely has potential, I mean different landscapes can make for a lot better variety, you know style course – and something like that would be cool – the only concern would be the height of the grass and the lack of visibility to see where your disc lands. TOWERS/WIRES BOTHER YOU? No, we have that same kind of tower at Liberty (9 hole course in Cerritos) and you know, its just an obstacle, I like having obstacles to deal with; it keeps you on your toes, so to speak, I like it.*

Urban Wash *Um, that would be cool, you know the water gives you an obstacle, like I said I like having obstacles in my way, I like things to shoot over like water, water hazards you know –*

Abandoned Factory *I think that would have tons of potential (long pause) I mean, shoot from the roof down to the floor, or shoot from the floor up to the roof, play on the different levels, or even just shoot over things, you know? - low ceiling shots – All these ideas, they have potential, it just depends on who is going to put them into*

effect. And how the turnout's going to be. If you can see the basket from the tee it makes it a little better, but if you can't it keeps the challenge up, just need a good balance. It's all about layout. Landmarks, like particular trees really help, reading the landscape is a big part of the game.

Factory Outskirts Yeah, sure that could work.

SUBJECT III-D | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 36-45
City of residence: La Mirada (2 miles)
Travel Mode: Car
Highest Education: High School
Income: 40-60K
Marital Status: single
PDGA Member?: yes (12 years)



Recorded *Interview Transcription III- D* | time: 2:10p (Thurs) location: table outside pro shop

- (1) How were you introduced to Disc Golf?
I grew up here in La Mirada, went to high school across the street, so it was kind of always around, but only played a couple of times in high school then after high school my younger brothers got real into it and then I started playing more so then after that Been playing seriously since 1998 or 1999. 13 or 14 years
- (2) Why do you continue to play to this day?
Ummmm, I played a lot of competitive sports when I was younger, and this was I could still do that wasn't gonna wind up with a broken ankle or something stupid, you know – you play in rounds with people and it wasn't as “uppity” as ball golf and more of a laid back atmosphere – the competition aspect of you know, originally playing your buddy's and whatever – seeing whose score was better and then as I got better at the game I found out that there was a regular pro tour and started playing bigger tournaments – I play a lot of the major tournaments now, as a matter of fact they just had one last weekend – I won the pro masters division – that's like 40 and over –
- (3) Why do you play this course?
This is my home course but I've played courses all over California, northern California, went and played tournaments in Vegas, and played some of the courses out in Arizona, and just the grassy rolling hills here, and the amount of space we have to work with, where a lot of other courses are more congested, they tend to criss-cross fairways because they don't have enough area – plus you've got a lot of elevation changes here and trees --- throws more aspects into the game. INTERPRETIVE SIGNAGE? I can see where it would be interesting and cool as long as there was a concerted effort in placement around the tee areas –
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Yeah, I grew up in this neighborhood, i've done all kinds of things in this park, yeah. Today, only on rare occasions do I come here for something other than disc golf.
- (5) Do you play other courses?
I play El Dorado in Long Beach on Mondays, I play the 9 hole course over at Liberty Park on tuesdays, and Twila Reid in Anaheim; Occasionally Oak Grove out in Pasadena. Oak Grove and Sylmar I don't really care for as much, they are kind of dirtier, I'd rather play

El Dorado, or Huntington Beach, Whittier Narrows is good. I don't want to get super dirty when I play golf and especially in the summer months the one in Pasadena is a joke, so is Sylmar, I mean definitely need a shower when you're done with the round.

- (6) **Do you ever change or modify the rules?**

Well, I'm a tournament player so we tend to play by tournament structure because we tend to gear ourselves toward tournaments.

- (7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land *Umm as far as like um a basket course where you had different obstacles. It would be cool to maybe go check it out once, but would I want to frequent it versus playing a course like this? Absolutely not. You know (laughing hysterically)*

Abandoned railroad *Once again, after my round would I want to sit back and enjoy the scenery and everything? Probably not. Not as much as you're going to want to enjoy the amenities in a nice park like this, you know.*

Groundwater Recharge Basin (Laughing) *Once again, maybe if they're playing a big tournament I'd go out there and play a practice round and leave and then go play the tournament and leave – looks just like a little too desolate, to like rocky, rocky and dirty (you know)*

Utility Corridor *Same thing....*

Urban Wash *I could see how that could be cooler, you know, you could play over the water and you could have like little woodsy type stuff on each side, you know, where you could run stuff through there (pointing to picture)*

Abandoned Factory *No (laughing hysterically) absolutely not (in a tapering laugh)*

Factory Outskirts *I don't see where it be near as enjoyable as other park friendly areas. Just like ball golfers, you know, would a ball golfer want to go play underneath that bridge or something, you know (laughing)....*

SUBJECT III-E | Demographic Data

Gender: M
Ethnicity: Latino
Age: 18-25
City of residence: Anaheim (9.7 miles)
Travel Mode: Car
Highest Education: High School
Income: 20-40K
Marital Status: single
PDGA Member?: no



Recorded Interview Transcription III-E | time: 3:00p (Thurs) location: table outside pro shop

- (1) How were you introduced to Disc Golf?
I got introduced through a co-worker, and uh, one of his buddies had a bag of discs, and he asked if we were interested in getting into the sport – He laid the basic rules out and it sounded like a good time, we started out just throwing at trees and then we found out there were actual courses (with baskets) – Actually, in Craig Park in Brea, California, you know just throwing at trees or trash cans, whatever. Twaila Reid, in Anaheim, was the first real course I ever played. 9 months ago.
- (2) Why do you continue to play to this day?
It's the whole outdoors thing, being with your friends, and being able to get away and get into nature and – Uh, I don't know, the whole aspect of it, I mean there's so many different things involved; math, everything. Competition also, I mean, I found at that there's more than just people doing it out there, and some people are really good at it – it drives you to want to be better –
- (3) Why do you play this course?
This course has so much history to it; it's the second course ever built after Oak Grove. And the fact that we have two 18s here is like heaven – I've probably been to 100 courses is this is my favorite one – I'm about to play my third round right now – INTERPRETIVE SIGNAGE: Yeah, I think that the more in depth you get with things the more you can relate – sort of give someone else the background or the story –
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
At this park, no, just disc golf
- (5) Do you play other courses?
You sort of get tired of playing the same course over and over and um, a different challenge, a different course makes people better, and wanted to conquer something different was always something I was into.
- (6) Do you ever change or modify the rules?
Um, I kinda can do it a couple of different ways, one is a card game, I don't know what its called. At Twaila (9 hole in Anaheim) we do, make up different holes – make things interesting, yeah.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land Definitely, I think that's really interesting, if you can get it into more areas I think it could be more popular –

Abandoned railroad *That's awesome, I think that's a great idea –*

Groundwater Recharge Basin That would be, yeah, I think Oak Grove kinda has a ditch like that,

Utility Corridor *Yeah I think, that looks similar to something else I've played – As far as the poles? The more obstacles the better*

Urban Wash That's awesome, yeah.

Abandoned Factory That would be intense, it would be pretty sick –

Factory Outskirts *That view wouldn't bother me (the industrial view), just the ability to get out there with your friends and use it (the land) if its not being used for anything else.*

SUBJECT III-F | Demographic Data

Gender: M
Ethnicity: Latino
Age: 26-35
City of residence: Hawthorne (23.9 miles)
Travel Mode: Car
Highest Education: High School
Income: 0-20K
Marital Status: single
PDGA Member?: yes



Recorded Interview Transcription III-F | time: 11:15p (Sun) location: table outside pro shop

- (1) **How were you introduced to Disc Golf?**
Uh, I was introduced by my friend... he had the wi (video game), you know, the nintendo wi, no, no I'm sorry it was the Playstation 3, it had disc golf game in it. I played that before, and then you know and some frisbee and I noticed my local park, it had baskets. WHERE WAS THAT? At Polywog in Manhattan Beach – It's like a 9 hole, small and easy – So, I got introduced just like that with a video game – 1 year ago.
- (2) **Why do you continue to play to this day?**
Day by day, I slowly progressed – I learned how to throw a disc, after I learned how to throw there were different kinds of discs that I was throwing as well, and just seeing the different flight pattern in the air, just got me hooked to it.
- (3) **Why do you play this course?**
I like this course cus it's an easy side and it's a hard side – and there's a lot of out-of-bounds on the harder side – WHICH SIDE IS THE HARD SIDE? The Lake side; it's a little more open, less trees, yeah, and the holes aren't that far, yeah, and I like it, it's a nice scenery. But I prefer the back, just because there's lots of out-of-bounds and it's more challenging. It really makes you be accurate. INTERPRETIVE SIGNS? Basically for me, I'm just here for disc golf, yeah, I just like the hiking
- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**
Ah, no actually this is my third time being here, when I come I usually home early and play, uh 6 rounds. Sometimes I play alone, you know, so I can throw a lot of discs, and sometimes its cool to play with other people, meet them and become friends. Like today is a weekly, I just found out about it last week because I entered the Virbram tournament. It was cool to see the locals, you know, different routes, different ways to shoot a disc.
- (5) **Do you play other courses?**
Oak Grove, yeah, and Sylmar is cool. I like the variety you know, fun courses.
- (6) **Do you ever change or modify the rules?**
Um, usually I do with my friends, when we play at Polywog, the ones I started playing with. We, we actually play different rules, harder rules too. An example is we play where it lies, like literally, so if it lands in the Lake and want to go play it you go in there, I've done

it once already, you go in there, you set your foot and you play it, or if its stuck up on the tree, we climb it; we either have to be in front of the disc or touching the disc to throw. So we can be like 30 feet up in the air touch the disc.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land Oh, wow, yeah, I would.

Abandoned railroad *(long pause) it's a little hard to tell what you guys might put out-of-bounds, but it looks, alright I guess, maybe a basket in the middle.*

Groundwater Recharge Basin Yeah I would, yes (emphatically) Yeah I like like how disc golf is very very different from regular golf. Because we can play like up in the mountains and rocky area, in hard conditions.

Utility Corridor I've actually played a round, something like that, I think Whittier Narrows has some power line, that doesn't bother me. If there's baskets I would go.

Urban Wash Yeah, I would definitely play that; get some floating discs.

Abandoned Factory Yeah, most definitely, I've never had the chance to play like, uh, cuz there was um, where I used to live in Hawthorne, there used to be a mall there and it was like abandoned and it was all open space and I, if I would have known about disc golf a few years back I would have definitely gone in there and played.

Factory Outskirts *Yeah..... no the view wouldn't bother me, it's cool.*

SUBJECT III-G | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 26-35
City of residence: Buena Park (4 miles)
Travel Mode: Car
Highest Education: some college
Income: 40-60K
Marital Status: single
PDGA Member?: no



Recorded Interview Transcription III-G | time: 12:15p (Sun) location: table outside pro shop

- (1) How were you introduced to Disc Golf?
Yeah, 1998. Huntington disc golf course. That guy right there (points) FRIEND? Yeah, old roommate.
- (2) Why do you continue to play to this day?
Well, I play real golf, it's cheap, something you go out with your friends, walk around. Recreation, things like that. COMPETITION? A lot of competition, like this guy (points) plays tournaments – but for its just to go out and bullshit with friends basically, that's my thing – a lot of people take it a lot more serious, not me – I just like it to get away from things, you know. INTERPRETIVE SIGNAGE? Sure.
- (3) Why do you play this course?
Well, it's the biggest course around that's local. I like shooting downhill – I don't like a lot of trees –
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
No.
- (5) Do you play other courses?
Huntington, and Twaila Reid, down the street. WHY? Close to his (points) house.
- (6) Do you ever change or modify the rules?
Sure, yep. CAN YOU GIVE AN EXAMPLE? We play 'best disc'; we play doubles, that's how we usually play. I prefer playing doubles; a good partner can make up for my bad shots.
- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Could be interesting; looks flat; not much output about that; as long as there's no earthquake.*

Abandoned railroad *That could be interesting; trip hazard,*

Groundwater Recharge Basin *That could be interesting right there, varied terrain,*

Utility Corridor *Naw, doesn't strike my interest. I don't want to near the power lines.*

Urban Wash *That looks pretty cool.*

Abandoned Factory *Well you could just go inside the factory and do drugs inside there – DISC GOLF? Sure, why not, it would like, you know, scenery.*

Factory Outskirts *yeah.... the view wouldn't bother me.*

SUBJECT III-H | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 26-35
City of residence: Norco (36.7 miles)
Travel Mode: Car
Highest Education: some college
Income: 40-60K
Marital Status: single
PDGA Member?: no



Recorded Interview Transcription III-H | time: 12:50p (Sun) location: table outside pro shop

- (1) How were you introduced to Disc Golf?
These guys (gestures to his friends) Almost 2 years ago. Prado, or was it River(walk). It was Prado.
- (2) Why do you continue to play to this day?
It's just fun. I like the fact that I can throw a frisbee further than anything else (laughs) I like the way it flies.
- (3) Why do you play this course?
(long pause, chuckle) we go to all of the courses actually, this one, I like it because its got two full courses here, and both courses are almost like completely different, like this one's more technical, and this one's more wide open – INTERPRETIVE SIGNAGE? Yeah, I like the outdoors, so that would be cool.
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
No. Yeah I live in Norco, so.....
- (5) Do you play other courses?
We play Prado, we play Glen Helen, Yucaipa, um El Dorado, we've played like all of them around here pretty much and I like all of them because of the fact that they're all a little different. All have their own challenge. Yucaipa, is just OK, you know, it's strictly a right hand course – Oak Grove; I can't stand that one, I like it, but I hate it, its just too technical for me. And it's further away.
- (6) Do you ever change or modify the rules?
We'll play ripped; he's (pointing to friend) got a card game called ripped-revenge that we play – A CARD GAME? WITH DISC GOLF? Yeah. So you play by different rules based on the card you have. Like it will say hey, you can't talk during the whole round, otherwise you get a stroke penalty, or you have to drive with your putter or putt with your driver or something like that, or randomly take someone's disc out of their bag to use. It's a card game I found, Innova (disc golf company) makes it; just a standard 52 card deck; just kind of changes it out; we don't play it all the time; we like to play by the PDGA rules as much as possible – we're all pretty technical people – At Riverwalk we made a 7 hole course into 15
- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *I think that would be cool; as long as there's no way to lose your disc, no easy way to lose your disc....*

Abandoned railroad *Honestly, like, I think anywhere would be cool, I like, we went to er, um, where was it, City Walk (comes to him suddenly) and I thought man this would be great to put a disc golf course here – Sometimes I'll just see how trees are when I'm driving and be like, if there was a basket there, that would be a cool hole (laughing).*

Groundwater Recharge Basin *Yeah, but the water, the water is OK as long as it's shallow and you could get your disc back.*

Utility Corridor *Yeah, well, needs more trees, if the whole course was just wide open like that it would get kind of boring I think. You need some change-up, at least some mandos –*

Urban Wash *that gives you more variety between trees and open spaces without making it too hard*

Abandoned Factory *That would be awesome, especially if there were some indoor ones – indoor holes – Any kind of weather you could go play –*

Factory Outskirts *No, that view wouldn't bother me at all.*

SUBJECT III-I | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 36-45
City of residence: Aliso Viejo (32.9 miles)
Travel Mode: Car
Highest Education: some college
Income: 40-60K
Marital Status: single
PDGA Member?: no



Recorded *Interview*Transcription III-I | time: 2:00p (Sun) location: against pro shop outer wall

(1) How were you introduced to Disc Golf?

Uh, well, growing up my older brother's four years older and we went to play at a course one time when I was a little kid and you know, er, brought my Wham-O, you know... Oh, man this was like early 1980's-- yeah, cuz I was a kid, it might have been '80 or '81 – And uh, played a round at this course and like forgot about it, I don't know, ten years later maybe – out of, you know, I was in my early 20's – SO YOU PLAYED THAT COURSE ONLY ONCE AS A KID? Yeah, so I got 're-introduced' by a friend who uh, just some buddy I met at the apartment complex and you know kind of got back into it that way –

(2) Why do you continue to play to this day?

Um, you know it's a really social thing – It's like the same reasons, you know – A lot of parallels between ball golf and disc golf are there – some people like laugh it off or whatever, but you know, it's kind of like a friendly thing, you know – Go out with your buddies on a nice day and hang out; get away from your women (laughs) or kids, or whatever and you know, obviously, it's a little more easier to do than ball golf cuz it's you know, not expensive, obviously, and you know, a round takes an hour, an hour and a half maybe, at the most, you know, ball golf and you gotta have a whole day for that, so in the summer when it's still light out you can work a full day, you know, drive to the course and you know, get a couple of rounds in, before, you know, going home for the night, so that's nice – DO YOU ALWAYS PLAY WITH OTHER PEOPLE? Pretty much, my buddy Eric, you might meet him, he's got a pretty cool background, you know, he's from Santa Cruz, and plays up there a lot – I don't know, I mean, it's kind of a drag playing by yourself – it's really not any fun, at least I don't have any fun – and you can always just run into people on hole 1 sometimes if they're cool and you know, or whatever – sometimes I do that – It's social – COMPETITION? A little bit, I mean within your circle of friends it's always a competition I'd say –

(3) Why do you play this course?

Really, it's like the only, or well, I wouldn't say the only but it's probably the best course around – you know, I mean I'm closer to Huntington Beach but on a Sunday Huntington Beach is just packed (emphasis) you know it takes forever to play a round you got all these people in the way and stuff, which, happens – depends on the

weekend, but – Here, there's two courses and they are both really pretty good courses, I mean they are – I'm a little sick of playing them because that's all I've played for two years you know, I'm used to playing a more wide variety of course but these two are really good, like today we are tee-ing off here (Lake Course) – normally, we meet at the back course – and just start there and play that a couple of times, but But we're playing the front this time, so – It's hard to really quantify a golf course; each one is really cool and unique and has its personality – but like Huntington Beach is really cool but it's on such smaller amount of land that it's kind of compacted in there – whereas this one;s just a little more spread out and roomy, like a golf course should be – WHAT ABOUT ELEVATION? Oh, it's great, elevation here is awesome, it's really the only elevation around – I mean you go to El Dorado and it's flat as a board and Huntington's got like what; three shots with elevation? But nothing like this, you see this kind of course plays to my game because I grew up in Ohio and all the courses are either over ravines, up hills, down, you know, like the variety of shots you have to do at a course like that compared to here, especially this course, it's just all arm, you know – It's how the course is you know, it's in a park and it's just kind of wide open – So, you know you just need a big arm – In Ohio there's like with pinpoint accuracy shots and, you know, like playing the fairway, instead of just going at the basket – you gotta think, OK, you gotta be on this side of the fairway, yeah just playing a lot of different courses is a lot more fun than just playing the same two or three man – VEGETATION? Wooded areas? Yeah (emphatically) that's the best, and there's none here man, you up to Orange County and you go up into LA and Oak Grove, you know, and all those, there's some courses farther north, you know. I live in Aliso Viejo you know, and it's all just to here (abrupt stop) – Let alone, driving all the way to Sylmar – which really bums me out, you know, being a lifelong golfer, you know, I'm looking at these parks and going you know “It would be so (emphasis) cool to have a disc golf park down in a Canyon, because you know, in Orange County they got all those big preserves and stuff that – Oh man, but there's so much politics, that uh, you know, working with the park's department, you know there's always some clowns that smoke dope out there and leave their beer cans laying around and mouthing off to some innocent family that just is walking across the fairway thinking it's just another park, you know, and like you've got your share of yahoos – playing disc golf that kind of make it look bad for everyone, I think, like anything else in society, you know, same ratio.... BUT IT KEEPS GROWING – It does, it does, and it's a shame that it's not promoted more because you kids; they're like they all just want to sit inside and play their video games and here's something fun, you know, it's safe, it's cheap, it's doable, you know kids can ride their bikes from the neighborhood, you don't need to invest a whole lot of money, it's like sad that more kids don't do it – It's usually like 20-somethings and up, like college age and older – INTERPRETIVE SIGNAGE? Uh, you know, I think that we be really of interest to me, but for the most part, I mean for the average disc golfers would probably just check it out one time and that's about it, I mean – I think it would be cool, I'm into that kind of thing, but – I think it's a different group from those people who just like taking a walk in the woods – It does kind of integrate both, but – that would be cool to have educational stuff like that, why not?

- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?

Yeah pretty much just disc golf, I mean if you had a family or something, I mean some of the guys they like, I mean their wife and kids are playing on the playground while they can play a round or two, that's pretty cool – for them you know – because the whole family is outside that way – It's nice to have those kinds of facilities

(5) Do you play other courses?

There's really only three I can play with regularity, which is this one, El Dorado and Huntington Beach you know; El Dorado is a good course, you know, if you're working that day and you know, you just want to take off at one in the afternoon and play a quick round and then back to work type of thing – it's kind of a casual course; it's so flat and easy and quick, um and see these people (points to a group walking across a 'fairway') just walking across the park just enjoying the day and its kind of hard trying to tell people, you know – I'd say that happens here the most –

(6) Do you ever change or modify the rules?

Uh, no and it's funny cuz Eric (name changed) and I we play like hard core by the rules, I mean, like mandos, you know, a lot of people don't play that stuff, and you know those little concrete ravines down there, those gutters, we play those out of bounds – OTHER GAMES? There's one doubles game called 'wolf' that's pretty fun – you can kind of bet, it's like skins with a group of people and – DO YOU GAMBLE? Uh, no with me its kind of a fun thing but you know, to make it competitive you gotta throw something on the line, if it's only like 5 bucks or soemthing, you divide it up, that way it's kind of fun – so if you call that gambling I suppose... (laughing) it's not like a lot of money or something – BUT DOES THAT CHANGE THE VIBE? You know, I think it does, it does for me at least – I mean you know, it gives you something to talk smack about, you know – but if you play with someone long enough you just give each other shit the whole way, you know. (Laughs) you know, talk to golfers over there (points towards ball golf course across the street) and they'll tell you the same thing – just kind of, a different twist –

(7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as: Oh yeah that's awesome (emphatically)

Freeway leftover land *Yeah, but you know, you've always gotta think, and this happens in Ohio a lot because they put horses out in the sticks and you got issues with discs flying into the roads and it could be really dangerous – you know – not only for the people driving, you know people running out there grabbing their disc, and you know it kind of sucks to configure a course – yeah, you know (pointing to picture) if this were a tee-pad right here and shooting out here where there's no way or a very remote chance of a disc going someplace like up to an exit ramp, it'd be awesome, I wouldn't have any qualms at all playing near or around, whatever...*

In Ohio there's just more park space, you know bigger, and actually what I think may have contributed to it Columbus was, you know the parks and rec department just because of the recession just you know, has been cutting their budget for so long there just like you know, we can't really maintain this park, you know, most disc golfers; there's always a few people who are responsible and pick up trash, you know make sure nothing stupd's going on and stuff like that so in some ways you'd ask the City and they'd sad 'yeah, take it off our hands; its fine – They'll even come and drop off truck loads of mulch and stuff and the guys from the course will distribute it and stuff, put in new holes, fix baskets and stuff

Abandoned railroad *Dude, that would be an awesome fairway, that would be a great fairway – that would*

Groundwater Recharge Basin *Uh, when it rains it would be kind of a mess, but I wouldn't have any issues with it – it's pretty cool – yeah (excitement in voice rising) that would be a really cool idea.*

Utility Corridor *Yeah, that's fine, that's kind of like um, like in Huntington Beach there is that utility corridor – and I go practice there sometimes – looks just like that except it's really manicured park. The wires don't bother me, no dude, if its a golf course I'll go try it out.*

Urban Wash *I mean that might be kind of stinky and stuff – don't they get a little scummy, those things – but you could design a course where it goes over the water that would be awesome –*

Abandoned Factory *Sure.*

Factory Outskirts *Yeah, like Carson – you know it's nice to see mountains, but you know it wouldn't bother me in the least. – I don't think anyone would give a crap.*

SUBJECT III-J | Demographic Data

Gender: M

Ethnicity: Caucasian

Age: 26-35

City of residence: San Diego (105 miles) – visiting Cal State Fullerton as a prospective school

Travel Mode: Car

Highest Education: some college

Income: 0-20K

Marital Status: single

PDGA Member?: no



Recorded *Interview* *Transcription III-J* | time: 3:00p (Sun) location: table outside pro shop

(1) How were you introduced to Disc Golf?

Um, well, my brother played it in college up in Oregon – you know Ducks.... But that's the first time I found out about it – my neighbor in Pittsburgh about 8 years ago was really into – (the first time I played) he took me out, yeah, he didn't have a car and uh took me out, he taught me how to play. Yeah, but he had probably 300 discs from all over the country, he played you know, he was into it from the beginning, you know. HOW LONG AGO? About 5 years.

(2) Why do you continue to play to this day?

Yeah, I mean, you know it was free you know – I didn't have a lot of money and there's some beautiful courses up in Pittsburgh, being out in the woods – Being outside and being a social thing as well, although I did play it for about a year just by myself, you know I play often by myself and enjoy it just being outside in the woods and stuff you know, getting out of the city is nice – I also grew up playing a lot of frisbee – ultimate frisbee, so it was natural – it's a much better thing than regular golf. WHY? More relaxing for me, more chill – not as frustrating, and the people are nicer overall. You don't come across a lot assholes who play disc golf (laughs)

(3) Why do you play this course? (Visiting Cal State Fullerton)

(4) Do you spend time in this park doing other activities in addition to your round of disc golf?

No. This is my first time playing this course.... there were some really nice courses in state parks, in Pennsylvania, they had a lake – and we used to go jump in the lake and hang out on the beach and then, you know, after we play disc golf, hang out into the evening and leave.

(5) Do you play other courses?

I play Balboa Park, umm, mostly in San Diego, I haven't been up here too much. I played one, I think somewhere around here, maybe it was Costa Mesa? WHAT ABOUT BALBOA PARK? It was difficult in the beginning because you couldn't tell where the pin is, but it was very technical as far as, you know it didn't as great as distances but as – was neat where you had to thread the needle in a certain way, there was an

element of accuracy that really pays off on that course that I like – And then the hills and all of that, it was pretty woodsy, you know, so, I like throwing in the woods you know, where you have a little corridor, uh that sort of thing – but also it's really annoying to have 4 different pin locations and you don't know which location it's at And they don't tell you where the next hole is and the maps are horrible – But um, it's really crowded over there and they charge you – those are the things I don't like about it – THINK WE NEED MORE COURSES DOWN THERE? Everywhere here (laughs) There's a ton in the Minneapolis area, I used to play there quite a bit over the last few years. INTERPRETIVE SIGNAGE? Yeah, I would, sure –

- (6) **Do you ever change or modify the rules?**

No, not really, pretty standard, unless, you know – I'm not real strict about the rules, I mean you throw.... MAKE UP GAMES? Yeah I do actually, for instance "This is a really interesting hole, so let's play two discs, let's play two holes out"

- (7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land *Oh, yeah, I mean as long as its considered safe – there's not a lot of people being murdered or something – yeah it would be totally cool.*

Abandoned railroad *Yeah, yeah, I'm up for that too, I mean we need courses everywhere. But that would probably be a lower priority, the railroad one – it just doesn't seem that interesting, not enough stuff to throw around –*

Groundwater Recharge Basin *Yeah, that would be, yeah, I'd prefer (that) of the three so far. It's got elevation change and that sort of thing, it's kind of interesting –*

Utility Corridor *Yeah, I'd play courses that look like that, sure. POLES/WIRES? No, no, there's one in uh, the East Bay (northern california) that had that, it's all buzzing: "Bzzzzzt" (makes sound) – Moraga I think it's called? Have you ever heard of that one? It's cool, it's a good course. I SHOULD CHECK THAT ONE OUT.*

Urban Wash *That would be a low priority one for me.*

Abandoned Factory *Well, yeah, yeah I don't know, it could be interesting. (pause) I wouldn't be so in to that one (laughs).*

Factory Outskirts *That wouldn't bother me too much honestly, no I mean, it is an eyesore and it's a little barren, not a lot of stuff to throw around, but uh, not ideal of course.*

SUBJECT III-K | Demographic Data

Gender: F
Ethnicity: Caucasian
Age: 26-35
City of residence: Redondo Beach (29.7 miles)
Travel Mode: Car
Highest Education: Bachelors
Income: 40-60K
Marital Status: married
PDGA Member?: no



Recorded *InterviewTranscription III-K* | time: 3:50p (Sun) location: table outside pro shop

- (1) How were you introduced to Disc Golf?
We had friends that had, um played before, and started bringing us here, I think this was the first place we played – La Mirada – and it was just borrowing their discs and, uh trying it out and figuring it out, but it was just interesting because I had thrown discus in college and I had thrown javelin, so I had experience of really using the body to throw something instead just letting it (the object) go, so it seemed doable. 2006.
- (2) Why do you continue to play to this day?
Um, I think that every day is different out on the course – so that's what keeps you playing, you know – cuz you can improve, but there's always going to be things in your way like trees or any turn on the course that makes it interesting there's always something new even if you've played the same course frequently – COMPETITIVE? For me it's typically a personal challenge, cuz, um as a chick (quick chuckle) my throws don't always go as far, my drives don't always go as far – and I've definitely improved on that since the beginning, so just keeping track of my own, score, I don't typically keep track with a scorecard either, so it's just the energy of getting towards the hole and feeling successful when it's a par...
- (3) Why do you play this course?
Uh, I like the nice grass, I think it's nice to walk on – Um, and it's different, I play a lot of different courses where there's real rugged, woodsy terrain and you're crunching over leaves and tripping over branches, but here you know it's a really nice walk in the park, so it's very easy on the foot, I think – PLAY BOTH COURSES HERE? Usually we play the front and are tired by the end of it so don't go back – I'd to come play the back first, so yeah, but today we have guests, so we're going to play the “main one” (lake course).
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
No, not here, maybe other places... yeah.
- (5) Do you play other courses?
Frequently we play at Huntington Beach because it's a nice course and it's got diversity (in the landscape) there, but sometimes we get adventurous and we travel you know, 40 or 50 miles on a Sunday morning just to go play – We play Sylmar, and we play Chavez Ridge and we play at Hahamonga Park (Oak Grove) and then we just

went on a vacation in February up to Oregon, and we drove and we stopped to play in Chico and (laughs) and we played in Oregon, but you know, all five days on a road trip we played in a different park – then you get all sorts of different terrain – I'm always looking at d g course-review (dgcoursereview.com) to find new courses in Southern California – In Carson there are two parks that have really small 9-hole courses and they are close by but they are not strictly disc golf courses – they are not that long or anything, so I wish those courses were better – I would like them to build one in Palos Verdes (laughs) I think it, they should put a course in right there because there's beautiful hills and it would be a great place to place and close to where I live – LIKE ELEVATION? Yeah. THICKLY WOODED? You know I think it doesn't matter because even if there are two trees in an open, broad place, I'll hit the trees (laughs) – If it's thickly wooded then you just know it's more of a challenge, but it's also part of the game, can be interesting – INTERPRETIVE SIGNAGE? Yeah, definitely, yeah, that's part of the reason it's a destination experience to me is to – like I said – see new terrain and deal with different stuff, so yeah, learning about that stuff would be great.

(6) **Do you ever change or modify the rules?**

Um, not a lot, usually it's strictly aim for the basket, I've talked about going to a regular park and be like “Aim at the tree” um, you know (to her husband), but he says he'd rather play with baskets.... like it's made for baskets and that's why you have the discs, and it's a challenge to get them in – but I don't mind shooting for objects, no. Like, say, “that third tree from the left”

(7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land Yeah, totally, mm-hmm.

Abandoned railroad Yeah that's cool, I felt like we were almost like that in one of the parks in Oregon (laughs) like there was a train, right by, in the thick of it, and it was cool.

Groundwater Recharge Basin Yeah, um yeah, it seems good, I mean it seems like the underfoot would be a little.... precarious with rocks and stuff like that –

Utility Corridor I think they should use that space, yeah – WIRES/POLES? Yeah, I live by wires (wouldn't bother me) –

Urban Wash Yeah, probably, the water feature would make it challenging,

Abandoned Factory Why not, never thought of it before, but very interesting, I mean I wouldn't go by myself, but with a group of players, yeah. I'm all for it, I mean adventure it out right?

Factory Outskirts No that wouldn't bother me.

YUCAIPA | II

Sunday, March 3 & Saturday, April 6

weather: cool late mornings and warm to hot afternoons with increasing breeze both days

SUBJECT II-A | Demographic Data

Gender: M

Ethnicity: Caucasian

Age: 46-55

City of residence: Redlands (9 miles)

Travel Mode: Car

Highest Education: Masters Degree & PhD work

Income: 80K or more

Marital Status: married

PDGA Member?: yes



Recorded *InterviewTranscription II-A* | time: 11:00a (Sun) location: table near bathroom

(1) How were you introduced to Disc Golf?

Oak Grove Park in La Canada California – they say Pasadena sometimes – I went to Oak Grove Elementary School – Uh, and the La Canada High and it was 1976, so I was playing little league down there (Oak Grove Park) and Ed Headrick put in the first basket – I had no idea what those were, so I asked my Dad “What were the hippies doing throwing frisbees at those things” He said “I think that's Frisbee golf” and I said “Let's try it” (exhales with low bubbling laughter) so 1976 for me... um, so 37 years now. WOW. The Headrick family lived about two blocks from where I grew up, they lived, I grew up on a street called 'Carmel Road' and the Headricks were like the 4700 block of Crown or 4900 block, so I remember seeing....the first thing I ever saw wasn't the basket it was a box and it had some sort of circle-steel openings, so you had to kind of hit it in (the disc) it wasn't going, if it didn't hit it square it wasn't going to stick. But those didn't last long – We were all throwing lids and fastbacks and all sorts of other stuff, so there wasn't specialty discs for disc golf yet.

(2) Why do you continue to play to this day?

So damn fun (pause, then laughter) – I was hooked the first time and it's never really changed – When I was doing grad school those were my 'desert years' that was probably '90, I'd say '93 to the first couple of years after that – Sam (his son, not present) was born in '97..., you (other son, present) were born in '99, and I didn't even start playing regularly until 2003 so its about 10 years off for me; grad school and young children, plus work and... – So, yeah it's fun, I think it's actually very beautiful (said with assertive confidence), there's an aesthetic to it – kind of interesting to some of your thesis maybe, is that, um, even your infill parks, uh, like a La Mirada or a Whittier Narrows would be another interesting one from this standpoint – cuz that's a I mean it's not a downtown LA park, but – It's surrounded, I mean the whole park's surrounded by industrial and the freeways and everything and um, you're out there

there's some trees, it's grassy, it's green, you know it's the whole pastoral myth that everyone goes to baseball games for – um, you get to a place like this which, um, which is genuinely quite beautiful ----- THAT BRINGS UP THE NEXT QUESTION.

(3) Why do you play this course?

Uhhh, a bunch of us started talking in about 2004 or 5 about what we could do to get more disc golf courses in the Inland Empire because we thought we have something that a lot of the LA County doesn't anymore – We have more open spaces out here on the fringes – and, let's, why don't we see if we can get some little courses put in here and there; Palm Desert, they put that one in, in a soccer park out there first, um. The Wrightwood course was still in, but it was kind of rough in those days, it was a good course, but it was, you're going to bleed a lot more than you do now – so it was an adventure – The people had 6 baskets in a pocket park in Rancho (Cucamonga), for testing as much as anything else, but you could go toss at that – uh – I'M SURPRISED THERE'S NO COURSE IN RANCHO (Cucamonga) WHERE INNOVA HAS ITS HQ? –

Well, they've had conversations with the City for Central Park for years, but you'd have to wedge something in, it's not an optimal position – SO YOU WERE INVOLVED IN STARTING THE COURSE HERE IN YUCAIPA? Yeah, there were a bunch of us who were like, well, we could just have sort of short term ideas sticking baskets someplace, or we-could-look-at-the-long-term (fast transition).... we always kinda saw Yucaipa Regional with it's 1000 acres, or whatever, very close to it, as the...grail. Yeah this is like a beautiful spot, it's an underutilized county park, they're always looking for extra revenue streams, um, and its beautiful; you've got some varied land and you've got all of these beautiful birds and you've got the water, and you've got the Crofton Hills and you know, San Bernardino Peak right up above you like a pyramid; it's beautiful yet it's underutilized, Ahhhh, well that would be cool, let's get our act together and do do a couple of little things and we'll go talk to them (San Bernardino County Parks) after we've proven something, then we somehow got to talking to them and they "Great" (laughs). Specifically the ranger was a guy named Burt Angeli, he was kind of like "What? Sure" You know this place is never used, I mean look at this, this is a Saturday (gestures around us), there's nobody here (emphatically) –

The location itself is quite spectacular, and uh, I like the birds, so, the birds are pretty cool, you get an eagle here once in a while – But then the actual course itself was designed by Dave Dunipace, so Dave did, I thought, a really good job (emphatically) There was only really minor tweaking after that – there was – hole 17 we are playing today (tournament) is kind of an 'after hole' – it's a crap hole a lot of people say, but it's a hard hole, um, the original 17 was hard-er – so this works a little bit better for a flow of walking around – but a lot of the holes out of the gate were just good; you going to have to throw straight, you were going to have to throw long, varied, right left, ...there was not a lot of uniformity in the holes, so it was a good course design in addition to the place – so it's like wow, everything we want – INTERPRETIVE SIGNS? Absolutely, yeah, I mean I think anything you can do ta' – I mean we'd like to put more signage in for the course but to be able to extend it to being aware of the environment you're playing in is great. CONFLICTS WITH OTHER PARK USERS? During the week during the summer you can come in and get a round, during the weekendnot, not so much – Mm, it's a multi-user park and disc golf needs to be able to

defer where it's appropriate –

- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**

Used to do more of that for the waterslide – but not so much anymore, I mean once in a while come out for a hike, or the kids when they were littler did a lot more waterslide – DO YOU STAY AFTER ROUND? Well it's mostly disc golf, but there's no hurry here, it's just sit and enjoy it – And you know one of the things about San Bernardino County Parks that is distinct from LA is they're wet (laughs) so you can have a beer – Um, that's a nice draw because a lot of places you certainly cannot do that, yeah they don't mind; so that would also include Glen Helen and Prado.

- (5) **Do you play other courses?**

Well, when this got put in we just felt like we won the lottery, because in my opinion, I've played most everything in Southern California, I think this is one of 5 best courses in Southern California. Now it's a par 54 so its getting to be like some of your Tahoe courses; the land available; have done some different things. Uh you got up to Portland you got – courses play par 61 or par 62, some par 4, a couple of 5's – It's very different golf when you're thinking that – If you ever get a chance to get up there from the standpoint of what you're talking about from the sheer beauty of the place it's mind-bending, and it's a fantastic, bloody-great golf course – If ever get up to Portland for business, I always make sure to sneak a round in – because it's so good. LOCALLY? We love Wrightwood, you know Wrightwood's a great course, a lot of fun, you know, all summer long its 8000 feet so its a lot cooler, make a day of it, and the resort has gotten to be very good to disc golf and have done a lot to improve the course We'll play Morley when we're in San Diego, and that's a matter of convenience because family is nearby – but you better get on that course by 7:30 in the morning or else it's going to be miserable – So, we'll play, we'll play really early, and be out of there by 9:00am – easily – We play Oak Grove because my parents still have a house near that – Goat Hill in Oceanside, that's on a ball golf course, that's an excellent course – So, it's gotta be especially or good or for a tournament. Tends to be very proximal.... we play Ford a lot, in Redlands, and there's a way to play that – the idea was for a practice course – The City of Redlands was really a nightmare when it comes to signage; they told us we could have signs and then all of a sudden we weren't – And we've gone back and forth on it for 6 years now about whether we should have signs – Consequently everybody doesn't know how to play it as it was designed – We'll make up Safari course; some of it's better, some of it's not – but it's designed to be a real pitch & putt; take a putter and maybe one mid range out maybe kind of work on shots – So for us, that's 5 minutes from our house. There have been very few courses put in, in the last 30 years, and those that have, have been on the fringes.... Very little infill. And I think that's tragic.

- (6) **Do you ever change or modify the rules?**

We always play PDGA rules, but if we play – with kids friends who haven't played before we don't want to lose them with the minutiae.

- (7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as: Absolutely, yes (emphatically).**

Freeway leftover land *Yeah, oh yeah, my motto's always when I talk to cities "Give us your poor, your tired, your, you know unwashed land" and we'll make a disc golf course out of it, so yeah.*

Abandoned railroad *Absolutely, certainly, especially if you could do something with whatever byways are right around it would be part of the (unintelligible, so you can go in and out of it – so its not just*

Groundwater Recharge Basin *Yeah, and you have a little change in elevation, yeah, that would be fantastic.*

Utility Corridor *Uh-huh, yeah, Montiel Park in San Marcos is underneath a utility easement – little 9 hole course – um, and that gets tons of traffic – and that's exactly how they got it-- Edison (power company) gave use of the land, you're playing underneath power poles and you might all grow a third eyeball or get cancer or something, but yeah, it's an example of precisely that, and it's not a bad little course.*

Urban Wash *Yes, yes, absolutely,*

Abandoned Factory *(Starts laughing at first sight of photo) I mean you know, in principle why not? I mean sure, you can get real creative with design, I mean your discs would get beat to hell, because of the concrete, real quick, but yeah.*

Factory Outskirts *Yes, you know I think the whole repurposing thing, maybe, if you take a look at the last 30 years, that might be the only (emphasis) way you can get at land. All of the above...*

SUBJECT II-B | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 18-25
City of residence: Escondido (83.6 miles)
Travel Mode: Car
Highest Education: some college
Income: 0-20K
Marital Status: single
PDGA Member?: yes



Recorded Interview Transcription II-B | 2:00p (Sun) location: between hole 6 and tee 7

(1) How were you introduced to Disc Golf?

Um, I was introduced to disc golf at 500 pounds and my parents asked my friends, you know to help me, lose weight, my best friend brought me over a frisbee, I went out for the first time; absolutely hated it (emphatically)...500 pound, sweating, walking just could not finish the whole 18; they came back every day of the week just to get me up around and moving and I kept playing (pause) now I'm hooked – every day – WHERE? Went out to Cal State San Marcos, San Marcos down there, southern California, yeah it was mid-joo... probably July, maybe it was August, and yeah we played out in the sun, played there, probably 18 holes course and probably 9 holes in called it quits; it was too much for me – And then it got to the point after about 2 weeks of playing I could finish the whole, you know course, and then the weight started coming off and now..... HOW LONG AGO? 1.5 years

(2) Why do you continue to play to this day?

The family that I create, that I found in it. The membership – where I work; I work at SDSF now which is a pro-shop at Kit Carson Park – And I have a disc golf team and their moral support is through the roof. Every day when I'm almost done disc golfing or I feel like I can't keep losing weight I get a word of encouragement from them and just the fellowship you find in disc golf with all the brothers, they're there to pick you up, they keep me going, it's the family, the community of disc golf – is what keeps me out here every day – And it's just fun.

(3) Why do you play this course?

Oh, uh, outside, being outside, the beautiful weather, the lake down here see all these birds, the squirrels, it's wildlife – you're out in the sun, I mean look at this, it's like 80 degrees, nice breeze, sunny, you can't beat this weather.... look at the tan you get (displays his forearms) You get a beautiful tan I mean, just outside breathing the fresh air – DO YOU LIKE THE WAY THE COURSE PLAYS? Yeah the strategic-ness with the tree placement – how tight some of the trees are, and when you're shooting uphill with a low tree cover makes just technical shots, and the up and down of the hills up here is intense – It's... you miss a putt and you could roll down a hill and go 30 or 40 feet – go

from having a par to double-bogey – and just with one shot – and just, it's tremendously set-up.

- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**

Um, not yet but since we've come up here we've noticed that they have the waterslides and the camp facilities; worth planning on future birthday parties and stuff like that – It's just there's so much land up here, I mean I've only played the disc golf, I mean all over here there's so much land – CONFLICT WITH PICNICKERS or PEOPLE FISHING? No, when we were down there (by the lake) they asked a bunch of questions about the sport, we told 'em a little bit about it, you know – show em the frisbees, and they're you know I might be out here playing next week. Next time they come out here instead of fishing they might be out on the course playing – you just give them a little bit of advice, tell them about the sport – I tell them about the weight loss and some of them are a little bit heavier-set, they're like "You can really lose weight" I'm like "Yeah" (very matter-of-factly) Just imagine you walk over a mile, every (emphatically) course is over a mile long, If you par you touch your feet, what? 54 times? That's 54 toe-touches....abdominal workout, cardio, everything, it's just tremendous.

- (5) **Do you play other courses?**

In this area around here I've played Prado, and Verdugo, I haven't played too many courses around here I more from down near San Diego – I live 2 hours from here so I'm slowly working my way up here to play all of these beautiful courses –

- (6) **Do you ever change or modify the rules?**

Oh yeah, we do that all of the time, me being a rec player, that's one of the lower classes of amateurs, I play with pros back home and so when they're stomping on us you know sometimes they go three birdies in a row, we'll make them putt left handed, or make them tee off left handed just to kind of – it's sorta like playing with a handicap but not really, kinda making them throw a little like us, it levels it out a little bit.

- (7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:** *Oh, yes.*

Freeway leftover land *Oh, yeah that would make more technical shots, I mean, with this freeway layout right here that's a great tunnel shot, I mean when I'm driving up home I have a "pop-up catcher" (portable disc golf basket) and if I'm driving through somewhere and I see like OH! That would be a gnarly tunnel; let's stop.; get out, set up the catcher and do it – We do that all the time and people see us do it and they stop and they're like "What? Oh, I've seen those at the park" and we explain, hey you can do it anywhere.*

Abandoned railroad *Abandoned railroads would be gnarly, I never thought about that. Yeah there's tons you can do there, I mean with the cross right there, I mean if you get a skip on that (points to picture) or if you say that that's out of bounds (points again to pic)*

Groundwater Recharge Basin *Seems to me you could make the water OB (out-of-bounds), that's just sitting there I mean the Government's obviously not using, that's gonna end up being a dump sport anyways, disc golfers walk through, clean up the*

trash.

Utility Corridor *Yeah, actually back home we have in San Marcos, there's a 9-hole, at Montiel, and there's actually utility poles that run right, up, through there. It's a great course, it's a 9 holes, goes up a hill but we've made a Safari there, we've made an 'old man 12' there, you could easily Safari and make it an 18 –*
Urban Wash *Oh, yeah, that would be cool.*

Abandoned Factory *That's what I'm already trying to get in to – Inside of a building, yeah I'm trying to find in-building shots, because you've got the windows that you can shoot out of, I've wanted to take, and make like a, you know how they have miniature golf; putt-putt for disc golf with like a swing, a swaying basket where you have to shoot through gaps – put a bus like an old bus, put a catcher in the middle of it; you've got all those windows you can go through – just anything you can find; an RV – - - so yeah, abandoned factories would be sweeeet.*

Factory Outskirts *That's the same thing from the San Marcos course, you can see the smoke stacks from the STG&E Plant and all that – it's actually cool to look at, when the sun starts going down and lighting it up and all that, it's just cool to see stuff*

SUBJECT II-C | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 46-55
City of residence: Yucaipa (3 miles)
Travel Mode: Car
Highest Education: some college
Income: 40-60K
Marital Status: married
PDGA Member?: yes



Recorded *Interview*Transcription II-C | 4:00p (Sun) location: table near bathroom near tee 9

- (1) How were you introduced to Disc Golf?
I met, a college buddy of mine, told me about it, we became mutual friends with an interest in frisbee, his brother had just discovered Oak Grove golf course in 1978, So, I met it through a friend in college who said "Hey" let's go play disc golf....playing with frisbees, and the original metal baskets.
- (2) Why do you continue to play to this day?
Uhhh, outdoors, exercise, it's a um, you know, more of an individual game, the same thing that draws people to regular golf, right, and the, I mean and, it's all the same as golf just different equipment, the same thrills you know; the agony of defeat and the thrill of victory when you sink that 120 foot birdie putt – you're testing yourself against the course – you run competitions, but every time you go out and play you don't need anyone else there because it's just a challenge of you against the course; so it's a wonderful individual sport –
- (3) Why do you play this course?
Ahh (long pause) the, I uh, I like the layout of it as far as its a short course per say, some people say it's too short of a course but it's a course that can get you into trouble real easy also – So, so it's a short, technical course, it's a challenging course as opposed to some of the easier courses (around here) it uses the elevation and the vegetation well –
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Yes, uh, because I have children, so they enjoy the other park facilities as far as the playgrounds, swim park, there's multiple playgrounds that we have here, there's fishing lakes – And, wull, I own a season pass, we live a mile from here so...
- (5) Do you play other courses?
Ford Park, in Redlands, because it's on the way home (from work) so it's a very convenient park to play in, unfortunately because of people you may have to wait to replay a hole – it's a short, friendly course – There's a nine hole course that was put in by the Boy's and Girl's clubs that was put in by Bill Murray Homes and Association, the Morning Kiwanis and the Boy's and Girl's Club of Redlands and they designed and

put in the course and that; official tournaments are played with that course design, The weeklies – because signage was approved and disapproved by City Council – I designed my own course down there because we got tired of going round and round and round, in reverse, and then forward, and then after several years now we have actually put markers in the ground so you know there's an 18 hole course that is marked out, laid out, we have maps.... OTHER COURSES? As far as the recent past, unfortunately, yeah, I just play Yucaipa and Ford Park, I don't get a chance (5-10yrs); (in the past) I've played almost every park in, every course in Southern California, Otherwise it's more of just a road trip as opposed to a particular course, you as far 3 or 4 years ago I went with buddies, alright boom, up at 5am, so we could be out at Sylmar at 7, so we could play 2 rounds at Sylmar (then) play 2 rounds at Oak Grove, (then) play 2 rounds at Whittier Narrows (one day). Yeah, it wasn't, it was more of the location of the courses, how are we going to do this.... Do the same thing, get up and go down to Long Beach, play Huntington Beach, La Mirada, now it's more of a location thing.

- (6) Do you ever change or modify the rules?

See above

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as: *Oh, yes.*

Freeway leftover land *You could design a sweet course there, that would be sweet.*

Abandoned railroad *Yeah, definitely.*

Groundwater Recharge Basin *(pause) yeah...that would be nice.*

Utility Corridor *That's like San Marcos, It's in the Edison right of way and it's like yeah, It's kind of up and down and around.... I don't mind the wires, you get more irradiated out of your cell phone next to yer..... (strong burst of laughter)*

Urban Wash *I have no problem playing in any of those type places, I uh, you know, that lend more to course design; as to what they do with it, you know versus, short boring course, you know, there's a little course in Norco that's only like 7 holes, OK, and leave the rest of your discs in your car and just bring your putter, yeah, it's not worth it (laughs)*

Abandoned Factory *(long pause, looks at picture) uh, oh yeah, anyplace, you got room down here in the yard (points to picture) you could throw down off the roof or out the second story windows, whatever...*

Factory Outskirts *Doesn't bother me, I'd play a course there... If a course is on the way I'm going, (I'll play it). Laughs.....*

SUBJECT II-D | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 18-25
City of residence: Yucaipa (2 miles)
Travel Mode: Car
Highest Education: some college
Income: 0-20K
Marital Status: single
PDGA Member?: no



Recorded *Interview*Transcription II-D | 4:25p (Sun) *location:* table near bathroom near tee 9

(1) How were you introduced to Disc Golf?

I just started paying about 5 months ago. I mean I knew about this park from when I used to mountain bike a lot when I was younger, um, uh sometimes hangout, pretty spots and I think they had just put the baskets in then. A friend of mine kept telling me about it and that I had to try it. I've been playing at least a few days a week ever since...

(2) Why do you continue to play to this day?

Just everything, um, it's so much fun (pause) DO YOU PLAY ALONE OR WITH OTHERS? I usually come out by myself and just start playing from hole 1 – At least half the time I end up hooking in, with you know, a group, play with them – I know most of the regulars – I learn certain things by myself but you want to see other people and how they throw too and, and talk about different shots... advice, you know. WHAT MAKES IT SO FUN? Hmmmm, well, most of all it's gotta be watching it fly when you throw it just right – I can't cease to be amazed at throws I can pull off sometimes; um, you know, figure out what different discs do and read the way the terrain goes... trees. SOCIAL? Yeah man... hang out with bros, meet people, that's cool – But no, I think I keep coming back because it gets me in a nice zone, where I can work on stuff. THERAPEUTIC? Uh, yeah, sure...now that, you know, I think it helps me clear the other crap in my life from my head; cuz of the focus of it, the concentration...

(3) Why do you play this course?

Well, I've really only played this one mostly... I go play at Ford Park in Redlands some-times but there are way better shots here (Yucaipa)... there's no tunnel shots, through thicker trees, and steeper slopes.... and the lake, and the mountains; and each hole is different; makes you want to play the next hole, and then play another round! And yeah, it's close, I've got a pass (parking pass).

(4) Do you spend time in this park doing other activities in addition to your round of disc golf?

No, not really, well, I've stayed for BBQs once or twice, maybe on a weekend.... When it's a weekend, and it's crowded, you know more groups using those picnic-pads you see along the course, and people fishing along the shore holes – We still play, but

maybe just short loops and stuff – more casual – and BBQ, have beer, play some more holes.....

(5) Do you play other courses?

You know, no. I mean I've gone to Glen Helen a couple of times – pretty cool – but it's all-the-same compared to here (Yucaipa) – Lots of wide open grass shots, not too exciting, to me – but pretty good. I want to check out some more courses, but this is so convenient, it keeps me interested, so far.

(6) Do you ever change or modify the rules?

No. Play by the standard rules.... PDGA I guess. I try to stay tight, even when I'm by myself, I think it makes me better, for sure. MAKE UP GAMES? Um, no...

(7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Huh (laughs) sure. Needs some trees, pretty flat, but if that was part of a course, you could make it cool – if'immm ya looped the holes just right through there (gestures to photo), yeah, that could be real cool.*

Abandoned railroad *OK, sure, that's also workable, I could be into that.*

Groundwater Recharge Basin *Alright, now you're talking, that looks more interesting, you know, I look at places like that all the time, driving around, and you know day dream about how a course might work. Yeah, with the water and the rocks, trees.*

Utility Corridor *Yeah, no problem – more different places, everywhere, I don't see why not?*

Urban Wash *(pause) mmm, up through the woods, down the opening, across, hell ya!*

Abandoned Factory *Yeah. OK, now there's lots you could do there. But for that? ... I might be like, might like part of a course like that, but I think I prefer more, you know natural places or trees or something.*

Factory Outskirts *Well, it might bother me a little, but... if the course was good, no, no problem, I'd play with that view.*

SUBJECT II-E | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 36-45
City of residence: Apple Valley (66.9 miles)
Travel Mode: Car
Highest Education: some college
Income: 40-60K
Marital Status: married
PDGA Member?: no



Recorded *Interview* *Transcription II-E* | 4:50p (Sun) *location*: table near bathroom near tee 9

- (1) How were you introduced to Disc Golf?
Hank (name changed) here (gestures to friend) – we work together – Caltrans. He introduced me I'd say just two months ago. HERE IN YUCAIPA? Yeah right here.
- (2) Why do you continue to play to this day?
It's just a lot of fun! And perfect for family you know... I've got three kids and I can play and come back for BBQ..... have some beers, it's great. I'm not very good, as you could see, but I'm a lot (emphasis) better than I was a couple of months ago. PLAYED A LOT ALREADY? Just about every weekend since I tried it, yeah.....the people here are nice as can be too. THE DISC GOLFERS? Uh, huh.....just fun people, you know, no bullshit.
- (3) Why do you play this course?
SO, FAMILY LIKES THE PARK? Yeah it's great; grassy fields, water, mountains to look at...the wife takes the kids to the play area or whatever and we meet back up. WHAT ELSE DO YOU LIKE ABOUT IT? Just real pretty scenery, you know.... trees, big trees and rolling hills, yeah... views, views of the San Bernardino mountains are awesome.....and uh, it's...at least for me, it's hard...some of the shots, especially going up the hills? Yeah that's tough, but I like that challenge.
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
SO YOU STAY AND BBQ AND DRINK BEERS? Yeah man, the family thing...and hang out with the disc golfers I meet, have a few (beers) with them....HOW MANY ROUNDS IN DAY? Uh, well, probably two, at least two each time I've come out here.....I think I did three this time.
- (5) Do you play other courses?
You know, I've only played one other one.... In Victorville they have one... near where I live. LIKE IT? Uh, yeah it's pretty good...in a public park there but nothing like this. Actually I've gone there a few times by myself, after work....only has the nine holes; great for me to practice..unwind, you know.

- (6) Do you ever change or modify the rules?

Uh, we usually play doubles and that's good for me, cuz I could use a good partner. That makes it more fun. I don't think I know all the rules yet, but these guys are cool; I think they let me get away with more... like not counting a stroke for getting up in a tree...but, no, I want to follow the rules... really play it right.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Yeah, like I said I'm always working on sites like that, that would be awesome...but I don't know...safety of course, you'd have to really make sure you couldn't throw it into cars.*

Abandoned railroad *I'd be all over it, sure, why not? I'd stop and play courses in places like that all the time if I knew about them.*

Groundwater Recharge Basin *Oh sure, you know you should make courses there, why not?*

Utility Corridor *Yeah....your gonna make me start looking at everything (laughs) and thinking about how to make them into frisbee courses!*

Urban Wash *Yeah.*

Abandoned Factory *pause...(laughs) yeah that makes me feel like a kid again --- I'd like that (laughs) putting baskets all around it.*

Factory Outskirts *Yep, that looks OK....more trees would be good....factory background is no big deal.*

SUBJECT II-F | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 46-55
City of residence: Highland (15.0 miles)
Travel Mode: Car
Highest Education: bachelors
Income: 40-60K
Marital Status: single
PDGA Member?: no



Recorded *Interview* *Transcription II-F* | 5:15p (Sun) *location:* table near bathroom near tee 9

- (1) How were you introduced to Disc Golf?
Friends.... back in Illinois, probably, mmm about 15 years ago...it was just something easy and fun for us to do... we got into checking out different courses. But, yeah... I didn't pick it back up until about year ago... since I've been out here (southern california)....
- (2) Why do you continue to play to this day?
WHY/WHERE DID YOU PICK IT BACK UP? You know, I went to Prado (reg. park with a 9 hole course) with my girl just to hang out, try some fishing..... hadn't been there before, and um, you know, saw the baskets, and saw some people playing.....I talked to one guy, and he mentioned a new course at Glenn Helen (another regional park) that was 18 holes that he liked...I like, got all fired up about, like I've gotta get back into this... I actually still had some of my discs, so I went there (Glenn Helen) and right away got hooked again. WHY? You know....I like watching them fly you know, it really like, smooths me out, you know, gives me something to work on.
- (3) Why do you play this course?
Well, I found out about this one, and now I just come here... I love it! WHY? The setting, you know, the water and mountains... and the course has holes, they change from one to the next, up and down..... It keeps me coming back because I, uh keep working on getting those lines; those certain paths through the trees or whatever, just stick in my mind, and... sometimes I nail em! ...it's so hard though to put a whole good round together here.... I guess I like that challenge....plays different every time. And getting the people I work with into it. That's fun... watching them get stoked on it.
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Sure, yeah, the BBQ thing is great..... beers and friends, hanging out. There's a lot of good spots (picnic areas) to pick from.... you know that's on weekends...but sometimes I come out after work just for a round. BOUGHT A PARKING PASS? Yeah. And you know, then it's like, just play and go...
- (5) Do you play other courses?

I need to play more. Glen Helen....Um, played Prado once....LIKE IT? Yeah its good, but you know, long drive, so...and yeah, not too much challenge...but uh, of course I've had to check the original; Oak Grove...that's pretty damn cool..I had a great round there, I think I played it even par....I like the woods and the history there, but it's too far usually. FORD PARK IN REDLANDS? No, no haven't played that... I should.

- (6) Do you ever change or modify the rules?

No, not really. MAKE UP GAMES? No.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Oh, hell yeah, looks like it could be fun.*

Abandoned railroad *Yeah... looks alright....*

Groundwater Recharge Basin *Sure.*

Utility Corridor *that's a little funny.... I mean, looks like you could lose your disc.... POWER LINES BOTHER YOU? Mmm, yeah a little bit...maybe not my first choice, but it I'd try playing if there were baskets. More courses near where I live, wherever you can put them! Is good.*

Urban Wash *Sure.*

Abandoned Factory *Yeah sure, I'd give it shot.*

Factory Outskirts *Yeah, sure....maybe screen the smokestacks and stuff? You know, I'd rather not see that, but no big deal.....*

SUBJECT II-G | Demographic Data

Gender: F
Ethnicity: Latina
Age: 26-35
City of residence: Yucaipa
Travel Mode: Car
Highest Education: some college (in college)
Income: 20-40K
Marital Status: married
PDGA Member?: no



Recorded *Interview Transcription II-G* | 5:40p (Sun) *location:* at respondents vehicle

- (1) **How were you introduced to Disc Golf?**
I started playing coming out with my husband... like, about 2 years ago. He was playing a lot; really loved it. HERE (Yucaipa)? Yes... and I would tag along with the group you, and just started throwing along with them, started liking it.
- (2) **Why do you continue to play to this day?**
You know, it's really the exercise – the activity – the sociability of it, hanging out with fun people, watching and getting better. COMPETITIVE? Uh, yeah, with myself a little I guess, mmm, but uh, not too serious. OTHER FEMALES? Yeah, sometimes, I will be the one who gets other people's wives, or whatever to come along on a round, start learning to throw it right – there's a few girls here (Yucaipa) who play a little and we'll have a girls round sometimes; it's fun.
- (3) **Why do you play this course?**
This park is really pleasant.... It kinda feels like a walk in the forest and.... you know like hiking, catching views but you're also playing a fun game....with friends....good energy, you know, the disc-ers just have all this enthusiasm.
- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**
Yeah, a little I guess...my husband does. I usually come by for a round and then go, but he usually plays a few rounds if he can... they bring the coolers; beer and food; so they hang out a little sometimes....
- (5) **Do you play other courses?**
Not really.... FORD PARK? Yeah I've played that...it's nice..pleasant...it's different...I've gone to Glen Helen for a tournament, but this is great, it's very close and I feel at home here. WANT TO PLAY OTHERS? Yeah, sure.
- (6) **Do you ever change or modify the rules?**
Well, when I first started playing we called everything a par 5...and then a par 4 for me...but I learned to throw it right pretty quick and get more distance..that's when

I started wanting to play more...even come out by myself a few times, yeah, so then it was just like, I want to play the same par as everyone else.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Maybe, I would try it.*

Abandoned railroad *Yeah.*

Groundwater Recharge Basin *Not as good... that water looks funny, and rocky...*

Utility Corridor *Uh, yeah that looks good. POLES/WIRES? Uh, that's alright, doesn't really bother me.*

Urban Wash *Yeah.*

Abandoned Factory *Probably not.*

Factory Outskirts *Sure, yeah.... maybe not all the time, but yeah.*

SUBJECT II-H | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 26-35
City of residence: Yucaipa
Travel Mode: Car (truck)
Highest Education: some college
Income: 40-60K
Marital Status: married
PDGA Member?: no



Recorded *Interview Transcription II-H* | 1:00p (Sat) *location:* tables at parking near tee 1

- (1) **How were you introduced to Disc Golf?**
I played golf.... you know, "ball golf" in high school, and knew about disc golf, you know as "frisbee golf" I knew about it, and I would come through here (Yucaipa Regional Park).... I'd throw my bike in the truck, park down the street and head up to the trails. MOUNTAIN BIKING? Yeah, I'd hit the trails and come back to the lake and hang out sometimes with friends who liked to have a beer and fish... so that's how I saw it...just saw some sick throws and realized...uh, ya know, that's "friggin' cool" – I want to try that! HOW LONG AGO WAS THAT? 'bout 3 years now.
- (2) **Why do you continue to play to this day?**
I love flinging the disc man, that's it-- love it! LANDSCAPE FEATURES? Oh yeah, every hole, you know, I play the course in my head every time before, on my way over, you know.... you learn the space (laughs) ...every branch, like "Yeah, I hit that one last time" (pause) and the wind can change; in and out of the trees...lots of strategy and technique! SOCIAL? Oh yeah, we've got a great group...you know; usually end up linking up in a good round....I've met some "cool cats" out here.....
- (3) **Why do you play this course?**
Yeah, this is my course... Um, I'm blessed with having it so close...that's why I can play so much.
- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**
Yeah, like today, you know, like I was telling, I couldn't play in the tournament today today cus of my (appointment) this morning but I'm doing my part (spotting on a blind hole)...yeah it's real social, we all like to hang out, talk about our rounds, you know, or whatever...I'll probably chow some BBQ with my bros and then play a round after....watching all these drives makes me wanna fling! COMPETITIVE? Oh, yeah I want to win, for sure, but mostly against myself, you know...uhm, keep getting more consistently lower scores...then if someone beats my best game, that's awesome...
- (5) **Do you play other courses?**
Well, I'd say, no, not much....Ford Park, yeah maybe, maybe I've played that few times, but this course is really good so I just play it mostly. You know, Glen Helen is pretty good,

- but the setting here and the layout is, to me, it's just way better....*
- (6) Do you ever change or modify the rules?
- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as: *Definitely...I'm always thinking about that... along the sides of of freeways, look up in the hills.... (INTERJECT)*

Freeway leftover land *Yep, there you go....*

Abandoned railroad *Uh-huh, ahh (looking more closely at photo), yeah that's cool.*

Groundwater Recharge Basin *Yes. Yes.*

Utility Corridor *Perfect, yeah....do a 'down-and-back'.....put some good trails in there, yeah.*

Urban Wash *Yes.*

Abandoned Factory *Huh, yeah... that would be different...actually haven't thought of that...real technical course maybe?(pause) might ding your discs pretty good? That would be cool if that was part of the course for like a few holes...maybe six holes?*

Factory Outskirts *Yeah, their's potential with kind of land.....no factory doesn't matter to me if I see that... might as well use that land there, you know, that's it..I'm for using it.*

SUBJECT II-I | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 36-45
City of residence: Yucaipa (3 miles)
Travel Mode: Car
Highest Education: bachelors
Income: 40-60K
Marital Status: married
PDGA Member?: no



Recorded *InterviewTranscription II-I* | 1:35p (Sat) *location:* tables at parking near tee 1

- (1) **How were you introduced to Disc Golf?**
My dad, yeah 'pops' used to take me out to La Mirada when I was a kid...yeah me and and my younger brother...It was a weekend thing for us when I was growing up in Fullerton.... My Dad was good, he was into it...Ummm, but yeah, played a little off at college but didn't pick it back up until we (with wife) moved to Yucaipa. HOW LONG AGO FIRST DID IT? Gotta be 25 years...something like that.
- (2) **Why do you continue to play to this day?**
Now I play mostly because it's just the best, and most convenient way, to stay active, I'd say...and you know, it felt good to get back into it...brought back memories... I recently had my brother visit and it was great.... He came out and played, loved it! It's really cool too...you know, it's cool get back into it now because of how much the disc technology has improved...how you can get more distance and really control it ...I'd say that really keeps me interested.....
- (3) **Why do you play this course?**
Well, yeah, I'd say the, well, the convenience is great!...But this course? The variety of shots; some tunnel shots... you know, the layout...like it's got some really unique uphill holes..you know, laid out so they're fun and challenging..but then maybe you need to ease off on your power and use more finesse on the next hole, you know...
- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**
Sometimes....I usually don't have time, but yeah, maybe hang out with some of the disc golfer, like today, you know; BBQ and brew, but I don't fish or swim..... I do try to stay away on busy weekends, you know..there's not really conflicts with the picnic people and stuff when it's crowded, but I can't really get in the groove I want you know....
- (5) **Do you play other courses?**
Well, I'd say, maybe Ford Park once in a while... I mean really I've only played there a few times....once of a tournament, But, yeah I stick to Yucaipa just because it's good it's challenging, close you know....Glen Helen, yeah, pretty good (pause) but, the setting here...I like it much more and the layout....and like I said, it's convenient, close.
- (6) **Do you ever change or modify the rules?**
No. no.

(7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as: Well, yeah, I would....I mean there's a lot of places around here (Yucaipa) that have potential...spaces that aren't getting use, yeah let's see those pictures.....

Freeway leftover land (Laughs) Yeah, sure, sure, why not?

Abandoned railroad Yeah.

Groundwater Recharge Basin Oh sure, yeah, that kind of place...for sure, those rough or varied terrains, they're all over – water hazard...vegetation. Uh huh.

Utility Corridor Certainly, yes.

Urban Wash Yes.

Abandoned Factory (Laughs)...looks closer at picture, that's an idea... I don't know of anything like that around here...but I don't know, there probably is, probably is....but yeah, hmm, not sure if I'd like it, but I'd love to try it!

Factory Outskirts Yeah sure, you know, but um, maybe not a first choice.

SUBJECT II-J | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 18-25
City of residence: Loma Linda (15.5 miles)
Travel Mode: Car
Highest Education: some college (in college)
Income: 0-20K
Marital Status: single
PDGA Member?: no



Recorded *Interview* *Transcription II-J* | 2:20p (Sat) *location*: tables at parking near tee 1

- (1) **How were you introduced to Disc Golf?**
At school, at college..I started taking classes down at San Marcos, um...and I met this guy who was excited about the course they were, that was just put in... actually on the campus....just tried it, he uh, you know, let me use a disc after ay, mm evening, class, you know. I had no idea about it (disc golf) really, I mean I think I had of heard maybe "frisbee golf" before. HOW LONG AGO? 2 years.
- (2) **Why do you continue to play to this day?**
Ahh, you might think this is funny..but it's really just like zen, you know meditation for me...It just smooths me out when I'm all caught up in family problems...or stressin from school, you know. IN WHAT WAY? ...I think, really, that spin; the way it flies and uh, how I learn to control it....like when I work on my disc game, I work on my life game, you know... COMPETITIVE? You know, kind of, I mean I'm pretty into getting better at, but not really against other people...know what I mean. KEEP SCORE? (laughs) sometimes....sometimes, not always, sometimes it's way more 'in the moment when don't pay attention.
- (3) **Why do you play this course?**
Just feels like I'm 'getting away' a little bit here...the sorta takes you on a little trip.... you know, down to the lake, back into the woods. IT's pretty close to where I'm living with my Mom right now. WHERE? Loma Linda. And um, not usually crowds here, mostly...plenty of space usually... PLAY WITH OTHER PEOPLE HERE? Yeah, sure sometimes...that's the other thing too, you know the people who play are always nice, so yeah, it's definitely cool to share a round, socialize a little...if they're not too competitive, but....you know, a little competitive is goof, it's alright.
- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**
Pretty much no...but you know I have started checking out what trails to take (hiking) from here...so, I do want to look into that...if I have time, check em out, that would be cool.
- (5) **Do you play other courses?**
Yeah, I've kinda checked out the classics you know... Just look up dgcoursereview, you know? Yeah, and so, Oak Grove, La Mirada....checked out Huntington once... I like all those courses...but too crowded...at least when I played them, and too far into LA area, you know...But yeah, for sure I'll go to Kit Carson (in Escondido), or Montiel

(in San Marcos); cool little course, different....um I played the new layout in Murrieta. WHAT DID YOU THINK? I liked that, yeah I liked it, for sure.....way more interesting now for sure... I like that it has some pretty good hill and valley shots there, and technical a little bit...makes you use some different kinds of shot.

(6) **Do you ever change or modify the rules?**

All the time...at least in my own mind (laughs).... you know, whatever I'm feeling, if I'm playing by myself...sometimes I'll just start playing a few holes, you know sorta get in the flow of it...and if I feel good I'll tell myself I'm gonna start keeping score on the next hole or whatever, and just say, start my 'official' round from there. Or, yeah, I'll play two discs, or more, for each shot...and play out the best one...not really keeping score, but just for practice, or jump holes, or play my own tees, you know whatever keeps my brain firing.....but, uh, yeah, if I'm shooting with other people, no, I sorta switch gears and get my head set on just going by the rules...or whatever, I mean, if who I'm playing with has a certain way....I like that my brain can adapt, you know (laughs)...I guess that's why disc golf is different, to me, than regular golf....

(8) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land Uh, yeah, probably wouldn't become a regular course for me, but I'd have to try something like that, yeah.

Abandoned railroad Sure.

Groundwater Recharge Basin That could work really well (looks closely at photo) kind of places, yeah, you could make it really interesting.

Utility Corridor Mm-hmm, yeah sure, like Montiel, sure.

Urban Wash Sure.

Abandoned Factory Hmm (laughs) OK, alright, yeah, why not? You courses like that could get popular, sorta novelty courses...I don't know if they'd let you do it, but?

Factory Outskirts Well, that's alright, not as interesting....you know, probably more interesting to be playing 'in it' than looking 'at it' like that...rather would see some mountains for sure.

SUBJECT II-K | Demographic Data

Gender: M

Ethnicity: Latino

Age: 46-55

City of residence: Yucaipa (2-3 miles)

Travel Mode: Car

Highest Education: associates

Income: 60-80K

Marital Status: divorced

PDGA Member?: no



Recorded *InterviewTranscription II-K* | 4:00p (Sat) *location:* tables at parking near tee 1

(1) How were you introduced to Disc Golf?

My nephew....about, uh, 3 years ago, right here, right here. I mean we were having a little family picnic and he finally convinced me to play a round with him..... I definitely played a lot frisbee when I was a kid, so it wan't too weird, you know? But different. I'm a golfer actually, and mmm, pretty much stopped playing regular golf since that day.....you know, it's still cool, just you know, this (disc golf) is fun as hell.....

(2) Why do you continue to play to this day?

Yeah it's fun...and it's cheap, that's, that's gotta be the big reason I keep playing, but it just makes, cuz it's something new, a new challenge, you know.....not as frustrating as regular golf...you know, I wasn't getting any better at that, while I'm having a blast throwing discs and getting better.....And it's more spontaneous I would say. I really like that....SOCIAL? Oh yeah.

(3) Why do you play this course?

Yep, that's it here at Yucaipa man, it is such a good group of dudes...you know the locals, lots of them have been playing for a long time....so always stories... I like the the stories, you know, the chatter! I mean, a lot of guys are way better than me, but I get to talk some trash....you know, light, like not real serious right?...when, uh I have a good round...I like to stir other people's competitive juices, you know....
LANDSCAPE? Oh sure, it's beautiful... like a little vacation every day. YOU PLAY EVERY DAY? Well..um, sometimes.....I'd say a few times-a-week lately...it's kinda my main social life now...

(4) Do you spend time in this park doing other activities in addition to your round of disc golf?

Like this, yeah BBQ... sometimes I plan for it, but sometimes it just happens.... then you know, play another round, or half round, or whatever.

(5) Do you play other courses?

Yeah I have, but not much. I play Yucaipa, I'm a homeboy I guess. It's easy.

(6) Do you ever change or modify the rules?

Naw. MAKE UP GAMES? No, I just play it straight I guess. DIFFERENT ROUTES/HOLES? Yeah I guess, short loops, to get some more holes in without doin a whole round...

(7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land You know, probably not for me.

Abandoned railroad Maybe, if you fixed it up a lot nicer...put in some good signs and benches....

Groundwater Recharge Basin That's better, sure, yeah

Utility Corridor I'd try it, sure.

Urban Wash Yeah, yeah that's nice

Abandoned Factory No (deadpan) I wouldn't want to play disc golf there.

Factory Outskirts Yeah, again, if you fixed it up nice enough with benches, and more shade and stuff, yeah....then I wouldn't mind the view as much.

OAK GROVE | I Pasadena, CA

Thursday March 28, 2013 | 10am-6pm

weather: warm, clear to partly cloudy and calm

SUBJECT I-A | Demographic Data

Gender: M

Ethnicity: Latino

Age: 46-55

City of residence: La Canada Flintridge (2 miles)

Travel Mode: Car

Highest Education: Bachelors

Income: 20-40K

Marital Status: married

PDGA Member?: no



Recorded *Interview Transcription I-A* | 10:45a (Th) *location:* at respondent's vehicle (in lot)

(1) How were you introduced to Disc Golf?

Here (Oak Grove) Uh, a friend of mine told me about it and said uh, you gotta try this, and uh, that was in '97 – And then it changed from “Are going to be golfing or not” to “When are you going next” – I got hooked right away.

(2) Why do you continue to play to this day?

Well it's active and it's inexpensive, and it's outdoors, and it's challenging, to keep you on a (pause) plane, to improve – but, because other people play better it makes you want to see how they're doing so much better at it when it's such a simple – you know, format. That makes it so much more challenging once you want to get better at it – MORE INDIVIDUAL OR COMPETITIVE WITH OTHERS? It's challenging yourself because of the people that we play with, but it's always for the love of the sport, it's not so much for the competition – but playing with other people is pretty high priority – I wouldn't probably play as much if I was by myself all the time – I'll play by myself as a warm-up but I'll try to make arrangements to meet people – It's more serious when you play by yourself because there's no distractions – and you work on (clears throat) what you think your weaknesses are – without someone criticizing you, you know or if you want to throw 2 shots, or you want to take extra long time – play by yourself, there's something that helps you play better, but you can never play as well with other people as you can by yourself – for a lot of reasons, both. It's always more fun with other people just because it's an experience to talk, and to socialize.

(3) Why do you play this course?

The landscape is tough here, it's tricky, it's a technical course, but this was the first course I've been to and the longevity of the people who play here is a lot more – this is one of the, was 'the' first course – some people that play here have been playing over 20 years – (laughs) 30 years – so you've always got something you can learn from them, but uh, um, the social breakdown here is, is, is more wide open, there's a lot more people that compete

and play for money but there's always monthly tournaments, there's two weekly tournaments that go on, there's organization, there's a club, shirts, board members, they are always working on improving the layout and making sure it – stays here – cuz of the conflicts with Pasadena.... Parks & Recreation.... INTERPRETIVE SIGNS? No, I think that would be real interesting, because the park is called Oak Grove for the amount of oak trees... and everybody struggles to point where they hit a tree and say "I want to just cut this tree down" or, wish that wasn't there, but that's part of the challenge – And if there were more signs about how you're not supposed to mess with any oak trees, like if they are fallen, they're still protected – and these live forever, even when they land on the ground they live forever, so people need to be aware of the environmental impact of not having protection around these trees – And yeah, if there were more signs that would be much more better, like they just started putting signs here about the Arroyo Seco, the bobcat awareness, pumas, cougars... I mean as far as course flow, there's always people who can guide you around – hole 1 changed, it used to be on that (points) side – so better signage would be good for the holes too.

- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**

Yeah, yeah, it's a big social place, there's people here you know that are just coming here to play golf and you meet up with them (after a round) and just talk and socialize – Because of this parking lot and being on the edge of the Arroyo Seco this is like a jumping-off ground for social activity – and exercise – not everybody that parks here golfs – a lot of bikers who don't like to ride to here, but they park here and they ride up and down the Arroyo – Like this guy says (points to a bumper sticker on a nearby car) "NASA" probably doesn't even golf – just uses this as a parking spot – a lot of people who work at JPL (Jet Propulsion Lab) just park here and take a little walk to work –

- (5) **Do you play other courses?**

This is my favorite because it was my first one, the next one I believe in Southern California would be Sylmar, that's pretty good – and La Mirada is like always the best – But a lot of people out there a lot of times – They are very challenging – a little frustrating in their difficulty but they're more difficult for everyone else – But if you've got better skills and can throw farther it turns out to your advantage – I do like for a change that it's more wide open, you can walk around in tennis shoes and you won't get dirty – Oak Grove here is notorious for it's Oak Grove dust – But, it's a nice change to go to a really grassy course – And you know it's really clean – It's very easy to understand where the next holes are, that's a well put together course –

- (6) **Do you ever change or modify the rules?**

Yep, I've seen more gambling at this course – well I don't know if I should even say anything about that – We have tournaments, we have tournaments, but, because of the layout there's a front and a back nine, it's easy for people to get into a 9 hole round, throw in a dollar – you know maybe play doubles, get teams and if you finish one side, start all over, scratch your score, play whole 'nother game, you know wait 'till someone finishes, and then wait till they go to the other side and then jump in on that – so, or you can just wait around until people get tired – cuz there's always rounds going on; there's rounds of doubles, rounds of singles, you see people that you know; there's grudge matches, there's people that have want to have taken down (beat) for some time – that are better because they're better and stay on the top

because – you, if I could take, like that guy over there (points) that Dan guy, just plays so much he's a formidable adversary and it shows how much he's played by how hard it is to compete with him – but everyone can be beaten, you know – I've never seen as much competition as I have out here – Like Northern California; you go up there you never see a money round – they're like "Money rounds? No." But if it's like a tournament, a monthly, then they'll play for money. HOW DOES THE GAMBLING AFFECT THE CULTURE? I don't know what it does, I can't explain why people just here – as opposed to every other course I've gone to – gambles so much ...cuz they want to match their skills up against others, you know, and this is such an easy course that some, and average person could have a lucky day and get a very low score and beat someone who's very good on any given day – If you just get, if you're in the zone, I don't know how you could explain it – but you know if it's only for a dollar.... but there's other games; "Wolf" people will play – depending on how many, the size of your group is – If you have 5 people and it's like a skins game, but the person who gets to call the skin changes on every hole – So, if there's one person goes first, he won't go first until the 4 other people, so. A LOT OF PEOPLE KNOW THIS FORMAT? (ignores question and goes on) And there's safari too, get a few people together and everybody who goes first gets to call one hole, one tee and one basket, you know you try to coordinate it around other people, not throw over their heads and stuff but you make them very hard, you say "I'm going to go from here to bathroom" or I'd say "from the water fountain to the basket by the bathroom" ...It's a very challenging hole because you've got nothing but trees – and everyone gets a chance – if the first person calls a real hard one, the next person can either try to call something easy or try to play something hard, you know, if you win it, it's a skin. So, it's not limited to just the layout as it is.

- (7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land *Well, there's challenges, I don't know about being so close to a freeway, the pollution factor, But structural design, since it's all wide open there – I guess no traffic on the lower part, um it has to do with the design – Especially with all that open space everywhere around freeways where you can't do anything, you can't develop it –*

Abandoned railroad *That would be fine. That would be fine.*

Groundwater Recharge Basin *That would be interesting, anything with mixed-up terrains cuz you don't need a golf cart, you're not looking for a little tiny ball – so you can have a rough terrain and still have an enjoyable game because it's easy to find your disc as long as you're not hiking across a big river – Have you ever seen the course they did at Chavez Ravine above Dodger Stadium? You can see how well they used the terrain there, it's a very small (area) – but they put in a whole 18 using you know, the steepness, the roughness –*

Utility Corridor *Sure that would be great out there, yeah – Have you seen Whittier Narrows? They've got power lines (he means the poles) fenced off right on the course – and that's not a problem – out-of-bounds too –*

Urban Wash *That's good, fine.*

Abandoned Factory *Kind of apocalyptic, huh? Yeah that would be, you could come up with all kinds of names for that place you know. It's fun to be in unique settings. You can fit little courses in a small area, which is still interesting. Great re-use, of, places.*

Factory Outskirts *That looks real harsh. Kind of an eyesore isn't it? It'd be hard to get people to come out, unless you know, that's in a place where like there's no other room.*

SUBJECT I-B | Demographic Data

Gender: M
Ethnicity: Latino
Age: 26-35
City of residence: Sherman Oaks (22.4 miles)
Travel Mode: Car
Highest Education: some college
Income: 20-40K
Marital Status: single
PDGA Member?: no



Recorded *Interview Transcription I-B* | 11:20a (Th) *location:* bench/boulders at tee 1

- (1) How were you introduced to Disc Golf?
My brother introduced me, he started playing with a friend of his – I'm sorry I can't think if that was the same person, anyway, that was about 5 years ago – I think that he learned in New York and he came out to visit, I believe, and that's when I went out and played with him – Was it here? (pause) you know, it may have been Sylmar – It might have been Sylmar, and he (his brother) would know better, I think it was here (Oak Grove) – Well, I think the first time I tried it we might have just gone to a park to throw (without baskets) just to see – get a feel –
- (2) Why do you continue to play to this day?
Uh, well I'm not really good, but I was good right away, so I didn't have a lot of frustration. Like I've played, I still do occasionally, regular ball golf, and completely just get pissed off all the time, frustrated as hell, whereas this, just uh, clicked and I started getting good scores right away – competing with him (his brother) almost right off the bat – So, that reinforced the “well this is fun and I can feel really good about it right now, right away”
- (3) Why do you play this course?
Yeah, I would say, well I kinda think culture may be a little heavier here but I haven't gone a lot of places – So, really, it's just because it's here (close) – I mean I would come back anyway, I like it, it's a nice course, it's beautiful, there's a lot of shade, when it's hot, it's not too bad – It's a cool set-up, it's tough – I mean there's times I wish it was wide open (laughs) and we do get some of that but, uh,
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
No, we don't come to this park for anything but that (disc golf).
- (5) Do you play other courses?
Yes, Sylmar, we played Burbank's new little course (9 hole), it kinda blows – they play ball golf there simultaneously, and that's slower, so a lot of the time you're sitting around waiting, too much – You know, we played this course in New York, where here we have all par threes, there – it was really wooded too – they had some par 4s and 5s, longer longer distance – but back to here, so, uh 18 holes is big – I like playing a full course – I like something that has a nice parky, or woodsy feel to it –
- (6) Do you ever change or modify the rules?

- Not really, I mean we might blow off a mandatory, around, you know.*
- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land Yeah, I would play there. If there wasn't too much concrete and it was laid out good, yeah.

Abandoned railroad *Sure.*

Groundwater Recharge Basin That's, I would choose that over the other two.

Utility Corridor Uh, you know, yeah, I'm a little worried about the power, and the magnetic field and the cancer clusters I hear about – that I'm a little leery of.

Urban Wash Yeah totally.

Abandoned Factory Oh, absolutely, yeah I mean I don't know if I'd love it, but I would absolutely go in a heart-beat

Factory Outskirts *Not at all, that wouldn't bother me.*

SUBJECT I-C | Demographic Data

Gender: M

Ethnicity: Latino

Age: 26-35

City of residence: San Dimas (24.8 miles)

Travel Mode: Car

Highest Education: high school

Income: 40-60K

Marital Status: single

PDGA Member?: no



Recorded *Interview Transcription I-C* | 12:20a (Th) *location:* bench/boulders at tee 1

- (1) How were you introduced to Disc Golf?
Uh, through other friends, here (Oak Grove) – 5 or 6 years now.
- (2) Why do you continue to play to this day?
The, uh, competitiveness and the ability to improve your game – and it's a little bit more lax-a-daisy than real golf, it's not as serious – I find it more fun than serious –
- (3) Why do you play this course?
*I uh, in all honesty, think this course is uh, uh, more challenging than other courses
In all honesty just because of the trees – they just eat your disc up all day – if there was a competition of hitting trees then I'd be good at that I feel like – But, it's different from other courses just cuz of the natural vegetation – other, well, it seems like the holes were built into the landscape, you know using the natural, like some of the trees actually make natural alley-ways already and you can shoot down, and that is kind of nice – And they give you options, like literally on hole 4, there's a big fallen tree – they use that as a shoot-around, it's almost like that's a big brick wall you have to shoot around, you know – strategic option, you know; you can shoot over it – I remember when that tree wasn't there, and the whole hillside collapsed from the rain and it brought in more trees in to the hole, and so it gets changed up over the years.*
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
No, I live in Burbank, so it's a little bit of a travel – There are other courses though that I play – This is actually one of the ones I play least now cuz I've found other courses actually on golf courses so you have like big open fairways to shoot down; it's a lot of fun –
- (5) Do you play other courses?
The other ones are well kept a little bit better, you know the signs that say “where next” it's easier, it's well marked, and at those you tend to pay – you know, anywhere from 2 to 5 dollars – like Veteran's Park in Sylmar, and there's like the 5 dollar one in Verdugo Hills – It's a pitch and putt course for ball golfers, so for disc golfers it's an ace run – The ball golfers are always happy to let us shoot through, haven't had any issues with them –
- (6) Do you ever change or modify the rules?

We always play 1 mulligan (re-do of a stroke) per 9 holes – yeah, that's about the only thing we do –

- (7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land *Absolutely, that would be so much fun – to like shoot over a freeway underpass – like urban disc golf; that would be really cool – I like that idea.*

Abandoned railroad *That gives it a very, uh artsy feel (laughs) it's just an artsy picture but, I love the idea, why not? Of course, it's a lot like this, it would just have a railroad track going through it – I just think it would make it cooler aesthetically; I don't think it would make the game any more complicated or fun.*

Groundwater Recharge Basin *Yeah, as long as it's safe to walk on the land, I'd be into it, yeah –*

Utility Corridor *That's kinda like this too though there is the powerlines it reminds me of this a lot – But I've even seen courses like this where the piece of land is very rectangular – And it's like a 9 hole course and you shoot to there and then to there (and so on) – and you just cascade down their property like – and the property is like only 200 feet wide or something like that, so the holes aren't very long, you're shooting straight at em, but it's more like a 9 hole that zigzags up property like that to utilize more holes in one space – It's a smaller easier course... people who are like getting into the game, it's easier for them to understand.*

Urban Wash *Water's tough, it makes you throw better, that's cool.*

Abandoned Factory *That would be cool – It's like World War II – yeah, absolutely.*

Factory Outskirts *No, no not at all (the view doesn't bother him) – I think what really matters to disc golfers is how your visibility to the basket, you know everybody wants either a little challenge but they don't want it (the basket) completely obscured, you know – Personally I like seeing the basket from the tee.*

SUBJECT I-D | Demographic Data

Gender: M
Ethnicity: Native American
Age: 46-55
City of residence: Duarte (14.1)
Travel Mode: Car
Highest Education: some college
Income: 40-60K
Marital Status: married
PDGA Member?: yes



Recorded *Interview Transcription I-D* | 1:00p (Th) *location:* bench/boulders at tee 1

- (1) How were you introduced to Disc Golf?
Right here, 1972, I was a little kid and looking for something to do – before the baskets – they'd have like a tree with a red piece of tape around it – they had a rock with some sort of red paint squirt on it – they marked everything somehow – And hole one used to be over there (gestures) – and there's an old original sign – you might want to take a picture of it to add to your little thing (thesis) –
- (2) Why do you continue to play to this day?
(long pause) hmmm, loved sports, liked competing, against other people, family other friends, relatives – the competition of it – It's like playing regular golf, I mean why do you play regular golf? Or, this is regular golf to me....
- (3) Why do you play this course?
Well, I grew up (laughs) a half mile from here – I went to high school right here – this is "the park" I used to swim out here, when there was water holes, catch frogs and crawdads all along here
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
When I was young, now it's pretty much for disc golf –
- (5) Do you play other courses?
Yesterday we were at La Mirada – We played both the courses – We play all the courses, I was in Yucaipa the weekend before – it was for a PDGA tournament – so just to go play, it's not convenient, it's an hour drive, this is convenient, it's close – In Whittier, we only play early in the morning, because once after early in the morning you have picnickers everywhere – it's too dangerous, you know the discs, it's too dangerous to be throwing around kids and picnickers – You don't get picnickers here, it's not a picnic park – even though there's tables everywhere –
- (6) Do you ever change or modify the rules?
Yes. Uhh, like give somebody a stroke, like Hank (name changed) will play, like the other day we played everything was par 4 for Hank, and Todd (name changed) and I it was par 3 – and sometimes we play teams and try to put the worst guy with the best guy – make it more fun for everybody –
- (7) Would you be open to/interested in playing courses designed on unconventional

landscapes? Such as:

Freeway leftover land *Oh yeah, yes, I've played at colleges, I've played at College of the Canyons, Sonoma State.....(don't know why he's mentioning these places but I need to move on)*

Abandoned railroad *Oh yeah, that's fun, it takes away the rollers, those guys that throw the rollers? (chuckles)...*

Groundwater Recharge Basin *Yeah, um the Perry Course up in Visalia, they have the aqueduct that runs through that course, they have little water areas like this (points to picture) kinda channels off it a little bit –*

Utility Corridor *There's one like that up in Salinas – military base, there's tons of power lines and tons of old, old training stuff they used to train the soldiers to go kill overseas – it was interesting but it was sad at the same time because you know it was there to train these people to kill people and to be killed to think of all the guys that trained there and died for no reason SO IT WAS KIND OF A NOVELTY? It was different because one section was all power poles, like the big ones, but then they had another area where it was like all military training stuff – you know they had to get em in shape before they die (laughter) I'm just being direct.*

Urban Wash *Ooh, yeah, that would be tough though, you'd lose your disc in that stuff I mean yeah, the more challenging it is the better it is to me because I like to play in the tournaments, so –*

Abandoned Factory *Oh, man, who cool would that be? I keep thinking they gotta make video games where you play disc golf in these situ environments – just so people would see, and then adapt it in real life –*

Factory Outskirts *No, not at all, we got JPL (Jet Propulsion Lab) here (in view) Have you walked around here and seen how much wildlife there is around here? Very few! You know crawdads and frogs were rampant around here when I was a kid – INTERPRETIVE SIGNAGE? Oh hell yeah, yes. This course needs that but, you know the JPL they were dumping rocket fuel into the soil there back in the '60s – that's why there's nothing alive down here, this is, nothing's alive, nothing survived, it's an environmental disaster, that's why....They've been wanted to turn this into a big park forever, and the reason they can't is because of the soil – they do soil tests and it's like “No”. And people who live in El Vero right up here, they've all sued million of JPL for their toxic dumping – people dying young of cancer – a lot of women died of breast cancer young around here, just this little local area right around here.*

SUBJECT I-E | Demographic Data

Gender: M
Ethnicity: Asian
Age: 18-25
City of residence: North Hollywood (20.3 miles)
Travel Mode: Car
Highest Education: some college (in college)
Income: 0-20K
Marital Status: single
PDGA Member?: no



Recorded *Interview Transcription I-E* | 1:30p (Th) *location:* bench/boulders at tee 1

- (1) How were you introduced to Disc Golf?
I picked it up because my friends from high school played, but, uh, just through friends – It was here – my first time was probably in '06, and then but, the first time I came out it was just to mess around, and then I really didn't start playing like myself, like got into it, like 6 months ago – YOU DIDN'T GET HOOKED RIGHT AWAY? Not really –
- (2) Why do you continue to play to this day?
WHY DID YOU COME BACK TO IT? Um, I just have a break between school – so I uh, I had to pick up something, so real golf and this – If I kept playing since then (2006) I would have been amazing – Uh, I like it because it's free, it's free (laughs) unlike, uh real golf cuz it's pretty pricey – uh, easy to pick up, you can just bring your friends, just to go outside, have a good time –
- (3) Why do you play this course?
There's lots of trees but not too overcrowded (with trees) – being an open field, even though it's a good shot there might be a tree branch that nicks it (the disc) you know what I mean – like a X-factor I guess, you know what I mean? Even though a good shot might look good, there might be a tree in the way – add strategy to your game.
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
No.
- (5) Do you play other courses?
Like Elysian park, that's really hilly, short course, but again that X-factor – there's trees and it's on a hill – so even though you get that hundred feet, you might roll down that hill – maybe, and so it makes it tough – it adds a different element, you know you need to switch it up, this is our home course (Oak Grove) so we go around to switch it up – Another is Verdugo Hills – it's a actual golf course – It's awesome! You know what I mean? We play with the golfers (ball golfers), it gets groomed – Another is like Sylmar – that's a \$2 entrance fee but – yeah it's just like Oak Grove – Uhh, (pause) La Mirada – down the 5 (freeway) – South El Monte – Whittier, near Whittier, we like to mix it up –
- (6) Do you ever change or modify the rules?

Yep, we do, we play doubles, orrr, two-disc challenge, where you're only allowed to use two discs, or best shot, closest to pin – like you know, one throw; closest to pin – It just makes it more interesting.....

- (7) **Would you be open to/interested in playing courses designed on unconventional landscapes?** Such as: *(interjects) Yes, definitely, and that's why we, our friend bought a pin (basket) – so we could go into different area, random areas and just throw around wherever you want –*

Freeway leftover land *(laughs) yeah, that's cool –*

Abandoned railroad *(laughing) again, that's awesome too. You know diferent, I guess like as players we want to make it interesting, you know and so different places, different settings – anything is good I think, as long as there's no people to hit.*

Groundwater Recharge Basin *Yeah, yeah.*

Utility Corridor *Oh, sure.*

Urban Wash *Yep.*

Abandoned Factory *Definitely.*

Factory Outskirts *Yeah, the view's not a problem.*

SUBJECT I-F | Demographic Data

Gender: M
Ethnicity: Native American
Age: 46-55
City of residence: South Pasadena (5.8 miles)
Travel Mode: Car
Highest Education: High School – trade school
Income: 20-40K
Marital Status: single
PDGA Member?: no



Recorded *Interview Transcription I-F* | 1:40p (Th) *location:* bench/boulders at tee 1

- (1) **How were you introduced to Disc Golf?**
My brother, 20 years ago. He was mister college guy....down in, uh SD, San Diego. So, that one, in Balboa Park was the first time. He took me out cuz he was playing it YOUNGER BROTHER? Yeah..... I thought it was great right away..but, uhm, didn't figure out there were also course up here until a few years later..... Oak Grove, La Mirada, Veteran's Park (Sylmar).... Ever since then.....Now, he's family man, doesn't play like I do, but I get him back out and kick his butt sometimes.....
- (2) **Why do you continue to play to this day?**
Once I figured out I had courses to play, it was just a, uh, almost daily after-work thing you know, uh.....really good competitive thing; work on my shit (throwing skills) and then test 'em against my bros, or whatever.... SOCIAL? Yeah sure, I know guys from way back....there, you know, someone's always got stories... there's history.... but always fresh faces...now especially (distracted)....mm, more kids...not just kids...more people showing up, playing.....Some are getting skills fast!
- (3) **Why do you play this course?**
It's close and it's habit....I mean, it's a cool course, but yeah...That social thing here.... Always activity. LANDSCAPE FEATURES? Good mix; open and tight shots, lefts, rights. I guess... feels like the woods, but, you know.... easy to walk.... play nine (nine holes) or 18, whatever... flexible.
- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**
Naw.
- (5) **Do you play other courses?**
Oh, yeah sometimes, I've played all of them. WHICH ONES DO YOU STILL PLAY? Mostly just Veteran's (Sylmar) WHY? It's mellow.... I mean the terrain, but a little more variety in the land (elevation)--- gotta pay 2 bucks but that's cool...they keep it nice and the store (pro shop)....that's where I usually get new discs...just habit I guess, you know, and, um, ah I just something different..... see different people.
- (6) **Do you ever change or modify the rules?**
No, PDGA rules. MAKE UP GAMES? Mmm, no not really. I mean, we play doubles; "best disc"...maybe put a few bucks on it? ANYTHING ELSE? no.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *Yeah, I'd try it.*

Abandoned railroad *Oh sure, sure.....interesting, yeah.*

Groundwater Recharge Basin *Water hazard, uh sure, use that land, I'd play it.*

Utility Corridor *Yep, that's like that one down south, near uh, Escondido, yeah, that works.*

Urban Wash *Let's go, I'm in.*

Abandoned Factory *(Laughs) No, well..... I don't know. I mean I'd try it... If it was laid out good, sure.*

Factory Outskirts *Sure, yeah....(view) not a problem.*

SUBJECT I-G | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 55-65
City of residence: Burbank (13.6)
Travel Mode: Car
Highest Education: some college
Income: 40-60K
Marital Status: single
PDGA Member?: no



Recorded Interview Transcription I-F | 2:15p (Th) location: bench/boulders at tee 1

- (1) How were you introduced to Disc Golf?
I was looking for something healthy to do. I, uh, I've come to this park (Oak Grove) since I was young, so I knew about it, the frisbee.... HOW LONG AGO? Mm, 'bout 2 years... year and a half probably.
- (2) Why do you continue to play to this day?
Exercise.... to just walk and give me something to work on at the same time. PLAY WITH OTHERS? Yeah, sometimes. Mostly I come play on my own when I get a chance. Sometimes with my nephew, it's good way to do something with him.... he lives real close so I'll go pick him up... HOW OLD IS HE? Eleven. WHAT ELSE? Just the outdoors, nice trees and views and stuff. COMPETITIVE? Naw...wull, I mean I get frustrated and mad sometimes...it's hard, but I just like to work on it.
- (3) Why do you play this course?
It's convenient... There's always people doing rounds here... I like to watch those really good throwers sometimes....the activity...and like I said, the trees and views and stuff. Aren't you going to ask me what I don't like? YEAH, WHAT? Well, they make it too hard. On some of the holes, like the one in the middle of that tree.? Why do they have to make it so hard to putt at the basket...that's not fair, they should keep it open (agitated, and frustrated tone)
- (4) Do you spend time in this park doing other activities in addition to your round of disc golf?
Oh no, not really, I told you I played in this park as a kid... NOSTALGIA? Yeah (very affirmative, and short). BUT YOU JUST COME FOR DISC GOLF NOW? Yeah, mm-hmm.
- (5) Do you play other courses?
Not really. I played on up in Oregon last year when I visited my Dad. There was one right at the park, near his place there. I had just started, so I went, to try it. LIKE IT? Yeah, sure. WHY? Nice trees. There was lots more grass there, and that was nice, not so dirty like here, but good views.... too many picnickers though on part of it! That was frustrating, I couldn't play all of the holes.
- (6) Do you ever change or modify the rules?
I don't play too strict, I just pick up the frisbee where it lands – I like to keep moving, keeps my blood pumping good. MAKE UP GAMES? I just try to put it in the basket.

I usually don't keep score, but sometimes I get pars.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *No, I wouldn't want to play there.*

Abandoned railroad *Well, mm, yeah I guess, that looks nice.*

Groundwater Recharge Basin *That's weird.... too much rocks.*

Utility Corridor *Mmm, yeah that's alright*

Urban Wash *Maybe, yeah that's nice, I would go if they didn't hide that baskets too much!*

Abandoned Factory *No.*

Factory Outskirts *No, that factory stuff doesn't make a difference.*

SUBJECT I-H | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 26-35
City of residence: North Hollywood (20.3)
Travel Mode: Car
Highest Education: High School
Income: 20-40K
Marital Status: single
PDGA Member?: yes



Recorded *Interview Transcription I-H* | 3:30p (Th) *location:* bench/boulders at tee 1

- (1) **How were you introduced to Disc Golf?**
Friends...they knew I was into ultimate (frisbee) so they kept bugging me until I came out.... that first time I played was at Sylmar...it was a weekly or something there and, uh I sort of got to see what it was.... you know borrowed a few discs and just went at it. I think I played through that course a couple of times, determined to get it right away. I had to figure it out you know. HOW LONG AGO? It was, had to be uh, 2004, so 9 years I suppose.
- (2) **Why do you continue to play to this day?**
Its the competition. I'm into competing, that's what drives me. SOCIAL? Yeah sure, I like the banter...that's part of it...the lower you score, the more everyone else tries and so on. PLAY TOURNAMENTS? Yeah, I play in most of the local ones.
- (3) **Why do you play this course?**
There's always some action here...always good players, the regulars, good players from everywhere show up cuz because it's Oak Grove, you know.... See those original signs over there? (points across the road)..... check those out, since the 70's man. I mean the history is very cool, but it's also just a great course – real short – but great cus it makes you do all your technical shots... you need to be very very consistent... because it's short, you know...anyone can have a good round, and we play lots of 9 rounds (9 holes).
- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**
Well, I mean I can spend a lot of time here... waiting between holes...looking for a good round. So socializing, bullshitting, you know (pause). Last week were throwing a football on the field just to screw around for while.... but no, it's really just disc golf. BBQ? No.
- (5) **Do you play other courses?**
Yeah, I play em all. WHAT'S YOUR FAVORITE TO VISIT IN THIS AREA? Probably Sylmar... or Elysian...both have more elevation than here...not as technical, but, yeah, also Sylmar is less dusty...nice to get out of the Oak Grove dust in the summer...so La Mirada too, for the summer....great summer course; grassy, usually cooler.
- (6) **Do you ever change or modify the rules?**
Yeah, we play Wolf, and we play Safari, and we play skins... we're always coming up

with, uhm, ah, making games to put few bucks on, mm, o just grudge matches.... ONLY HERE (at Oak Grove)? Uh,...yup, mostly, that's true. Not so much at other courses I think cus I want to play other courses 'straight' just, you know...don't play them as often....test my score.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as: *Starts to chatter with friends, and shift focus) LOOK AT THESE and tell me what you think.....*

Freeway leftover land *New frontiers, yeah, for sure.*

Abandoned railroad *Yeah.*

Groundwater Recharge Basin *mm-hmm yeah.*

Utility Corridor *Yes.*

Urban Wash *Uhhh...yeah, sure.*

Abandoned Factory *(Short burst of laughter) Yeah.*

Factory Outskirts **Yep.**

SUBJECT I-I | Demographic Data

Gender: M
Ethnicity: Black
Age: 18-25
City of residence: Los Angeles (13.4)
Travel Mode: Car
Highest Education: some college
Income: 0-20K
Marital Status: single
PDGA Member?: no



Recorded *Interview Transcription I-F* | 3:50p (Th) *location*: bench/boulders at tee 1

- (1) **How were you introduced to Disc Golf?**
I'm just getting into it (gestures to his friend) ...we started comin' out here to try it and and got hooked right away... He (gestures again to his friend) tried it on a field trip when he was a kid. HERE? Yeah. Just to get into something different I guess. HOW AGO? Just a month... two maybe?
- (2) **Why do you continue to play to this day?**
We just came and saw what...how some of these guys can throw, you know, make it go...different lines....And for me it's a good way to exercise without realizing how much I'm actually exercising, you know what I mean...I've got some pounds to burn. COMPETITIVE? Uh, yeah, well just between us (his friend), so far.... we still kinda suck.
- (3) **Why do you play this course?**
Just, well, close I guess... pretty close, and gets you away from the concrete jungle, into the woods. But then yeah, mountains are right there too, feels so open..... And the people are so cool... You can just hook up with groups for short rounds... no bad attitudes.....nice not to have attitudes!
- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**
No.
- (5) **Do you play other courses?**
Uh, we're just starting to check some out..... Went to Sylmar actually last week, cuz' someone recommended..... That's different, I liked it....two bucks, no big deal, yeah that was cool.....some different shots there. I want to check out some more! Um, and Whittier...that's pretty good...but I think I like the more, the trees here, or Sylmar, more trees, you know, like 'the woods', I need the shade! And it makes for cool shots. Whittier was pretty flat though...easier to walk and lotsa grass, but...maybe a little more boring?
- (6) **Do you ever change or modify the rules?**
No. MAKE UP GAMES? Mmm, well he (his friend) isn't giving me strokes anymore (handicap)... He would kick my butt at first cuz he could throw further, but I'm catching up!
- (7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land *Yeah, anywhere man, yeah. Put 'em all over.*

Abandoned railroad *Uh, yep, sure that's pretty nice..... tree lines... across the tracks, yeah, different ways.....*

Groundwater Recharge Basin *A little water, that's cool (laughs) Um, yeah I like the variation, looks interesting.*

Utility Corridor *Yeah, maybe so more shade! But yeah.*

Urban Wash *Now yer talking...you know, I like variation.....could be cool.*

Abandoned Factory *Yeah, around that factory? Yeah maybe, probably not my first choice.....I'd like some more natural than that, but I'd do it.*

Factory Outskirts *Yeah, it's open, the factory is in the distance.... so no big deal. Looks like the land might be cool. But trees, man trees.....like this (gestures to the Oak Woodland)*

SUBJECT I-J | Demographic Data

Gender: M
Ethnicity: Caucasian
Age: 55-65
City of residence: Arcadia (11.9 mi.)
Travel Mode: Car
Highest Education: associates degree
Income: 40-60K
Marital Status: married
PDGA Member?: no



Recorded *Interview Transcription I-F* | 4:40p (Th) *location*: bench/boulders at tee 1

- (1) **How were you introduced to Disc Golf?**
Friends.... long time friends. Uh, they'd been been playing for years. WHERE? Mmm, here I think, no wait.... I think it was La Mirada actually. Yep, first time was there. HOW LONG AGO? Must have beeeen... 10 years at least. A little more I guess. Yeah it was, must've been like 12, cuz it was right after 9/11.
- (2) **Why do you continue to play to this day?**
Mostly, just really like the way they flew... being able to control the flight. I'm a really technical kind of guy, and the shapes and wieghts and techniques...still...that's what keeps me coming back. SOCIAL? Yeah sure, that too; Hang out with other people who enjoy it. It's relaxing, it's a distraction, something to get involved with away from home, stress, you know.
- (3) **Why do you play this course?**
Real convenient. Plenty of shade.... Always someone to join in a round. I know a lot of the regulars. Feels like I'm kind of out nature more.... compared to a lot of the courses in parks around here. LANDSCAPE FEATURES? Yeah, 'Oak Grove' you know, that's the name.... I like the trees here.... but then, yeah, there's some elevation, but it doesn't beat you up... different holes, layouts, changing pins (basket positions). Mmm, yeah all that....keeps it interesting.
- (4) **Do you spend time in this park doing other activities in addition to your round of disc golf?**
Mmm, in fact, no. Not now. Before I started playing disc though.... Yeah, I used to be into Mountain biking and would come here with riding partners, head up into hills, come back here (Oak Grove Park), and actually, yeah, sit right over there (points to bleachers by softball field) and have a... picnic...refreshments, you know, after the ride. DON'T BIKE ANYMORE? No, no, too much work.... I guess yeah, the disc golf is the kind of workout...perfect exercise for me these days, more relaxing.
- (5) **Do you play other courses?**
Sure, I play all of them. Usually, only when I plan it with other people... If I go play by myself, it's Oak Grove....Yeah, you know a group of us might plan a day; play a few courses, make a day of it....a competition between us where we see who scores lowest combined, you know.... make it more interesting, think about the courses we're playin' and how to strategize.... WHICH ONES? Sylmar, sometimes Elysian, La Mirada....Long

Beach and Huntington maybe if we go south. It's nice to go to those grassy courses for a change.....at La Mirada you get the easy walking and the elevation interest in one, you know.... and both courses there, uh, um yeah, Variety is the Spice of Life....

- (6) **Do you ever change or modify the rules?**

Oh yeah sure, like giving strokes, playing for lunch, making up mandos.... but only when it's with someone I really know, like when we're road trippin... I stick to the rules when I'm playin' with someone I haven't played with before, you know, of course.....

- (7) **Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:**

Freeway leftover land *Yeah, sure, there's places like that all over, why not? Just would have to control that layout for stray throw, cars.....*

Abandoned railroad *Yeah, anywhere is good if they let you put it in.*

Groundwater Recharge Basin *Hmm, OK, sure there's some interesting stuff happening there... potential. Yeah.*

Utility Corridor *Sure.*

Urban Wash *Better test that water! No, yeah, I would like those types... with a good design.*

Abandoned Factory *Uh, yeah sure, I'd try it..... not the best though.....*

Factory Outskirts *Sure. The factory view? No big deal, but you know, not a priority, but yeah, whatever, wherever they'll let you put some baskets, I'll check it out.*

SUBJECT I-K | Demographic Data NEW

Gender: M

Ethnicity: Caucasian

Age: 18-25

City of residence: La Canada Flintridge (2 mi.)

Travel Mode: Bike

Highest Education: Bachelors

Income: 40-60K

Marital Status: married

PDGA Member?: no



Recorded *Interview Transcription I-F* | 5:30p (Th) *location:* bench/boulders at tee 1

(1) How were you introduced to Disc Golf?

In Dallas, 6 years ago, my brother's a pro and he showed me. We played all the courses out in that area.

(2) Why do you continue to play to this day?

Just liked it, and there's Oak Grove right here, I'm a local. LIVE HERE BEFORE INTRODUCED? Yeah, I mean I knew about, but you know, I was in High School and then went away to college.... never got into. UNTIL TEXAS? Yep, visited my brother and basically got hooked. WHY? Just the mind-body...that's it! It's a sport, but it's different from other sports I've played; just working on your own game and strategy....It gets me to think about the mind-body connection.... I like that. STRESS RELIEF? Well, yeah, I don't have a lot of stress....maybe that's why (laughs). SPIRITUAL? Sure, yeah...mmm I do like to think of it that way (smiles and looks around) – SOCIAL? Usually no... I play a lot on my own, sometimes, yeah, it's a good way to meet some really cool people I'd say....

(3) Why do you play this course?

Well, the biggest thing is that it's so close, and I can just roll down here on my bike or stop in my car for nine holes on my way somewhere else....And yeah, you meet some interesting people here.... always someone playing.... get to see some great players sometimes, that's cool.

(4) Do you spend time in this park doing other activities in addition to your round of disc golf?

Not really.... except I'll bike through sometimes, but not inside...other than disc golf.

(5) Do you play other courses?

I do. I played Verdugo recently, to check it out WHAT DID YOU THINK? Not a big fan I guess – I thought it was weird mixing with the golfers and walking over the greens and stuff... but cool...just, I guess, umm doesn't feel like you are supposed to be there. Kinda fun though! Get a brew after front nine!... but. OTHER COURSES? Yeah a few... The one by Dodger Stadium (Elysian) but that's not worth the trip, its alright... only a few really nice holes..... Sylmar's cool, 'like that one....it's kinda like Oak Grove, being next to the mountains, lots of trees...but more open.... good design. But it's better here (Oak Grove) so....I mean, why travel?

(6) Do you ever change or modify the rules?

No, not really. MAKE UP GAMES? no.

- (7) Would you be open to/interested in playing courses designed on unconventional landscapes? Such as:

Freeway leftover land *A lot of places like that! Sure (laughs)*

Abandoned railroad *Uh-huh, yeah – some safety issues maybe?*

Groundwater Recharge Basin *That looks great, I'd try something different.*

Utility Corridor *Yeah, I played a course in Texas kinda like that, sure, get creative!*

Urban Wash *Yeah, mm-hmm (enthusiastically) sure, lotsa places like that.*

Abandoned Factory *I'd definitely try it! I don't know if, if it would be g-great, but definitely I would really want to try it. (Pauses) opportunities.....*

Factory Outskirts *Sure, no problem.*

F: Disc golf news story catalog & samples

(new courses and activism)

C A T A L O G

August 25 2010

<http://www.edmontonjournal.com/news/Sweet+Spot+Disc+golf+puts+great+spin+summer/3444198/story.html>

http://www.pennlive.com/midstate/index.ssf/2010/08/more_senior_citizens_are_pushi.html

<http://www.sentinel-standard.com/news/x2143021873/Fore-Watch-out-for-the-disc-golf-course-at-Bertha-Brock>

<http://www.newstrib.com/articles/news/local/default.asp?article=22795&aname=Disco+golf+course+opens+on+IVCC+campus>

<http://www.forestcitysummit.com/articles/2010/08/26/news/news01.txt>

http://columbustelegram.com/news/local/article_339e379a-ac6a-11df-8f04-001cc4c002e0.html

<http://www.ironcountyreporter.com/archives/2010/august/08-25-10/article05.htm>

<http://www.connectionnewspapers.com/article.asp?article=343748&paper=61&cat=104>

<http://www.voanews.com/english/news/usa/New-Twist-on-an-Old-Sport-99850954.html>

<http://communitypress.cincinnati.com/article/20100819/NEWS/8190339/New-Miami-Twp-disc-golf-course-honors-resident>

<http://www.libertytribune.com/2010081910385/news/clay-county/proposed-disc-golf-complex-raises-support.html>

<http://www.gateline.com/2010/08/18/7611/disc-golf-course-now-open-on-key.html>

<http://www.charlotteobserver.com/2010/08/25/1632351/one-more-game-before-classes-start.html>

<http://www.sheboyganpress.com/article/20100818/SHE0601/8180315/Letters-Many-aid-Vollrath-disc-golf-course>

<http://www.nrtoday.com/article/20100820/NEWS/100829990/1063/NEWS&ParentProfile=1055>

<http://collegepark.patch.com/articles/video-jeremy-ginnever-at-calvert-road-disc-golf-course#video-1241201>

(VIDEO)

<http://verdenews.com/main.asp?SectionID=1&SubSectionID=1&ArticleID=37809>

<http://www.charlevoixcourier.com/articles/2010/08/04/news/doc4c59b0390bcd3686558682.txt>

<http://www.wahpetondailynews.com/articles/2010/08/10/news/doc4c61b425ab29b785677222.txt>

<http://www.thenorthwestern.com/article/20100805/OSH1003/100805028/Committee-wants-Pepsi-grant-to-build-accessible-playground-disc-golf-course>

http://www.gjsentinel.com/sports/articles/growing_form_of_golf_disc_thro/

http://www.atascaderonews.com/v2_news_articles.php?heading=0&page=77&story_id=3023

<http://www.commercialappeal.com/news/2010/aug/25/focus-health-fitness-horn-lake-is-health-champ/>

(MISSISSIPPI)

<http://www.echopress.com/event/article/id/77660/group/Opinion/> (GANGS)

<http://www.charlotteobserver.com/2010/08/04/1591537/fore-watch-out-for-lots-more-flying.html>

<http://www.tbnewswatch.com/news/103833/City's-disc-golf-course-up-and-running>

<http://www.liberty.edu/news/index.cfm?PID=18495&MID=20158> (CAMPUS COURSE)

<http://www.poconorecord.com/apps/pbcs.dll/article?AID=/20100823/NEWS/8230318/-1/NEWSMAP>

http://www.rapidcityjournal.com/sports/article_b64895f2-aca4-11df-ad69-001cc4c002e0.html<http://www.theadobepress.com/articles/2010/08/19/news/southcounty/news11.txt>

<http://www.desmoinesregister.com/article/20100803/NEWS/8030317/1001/NEWS/Goal-for-Beaver-Creek-Balance-Mother-Nature-public-amenities>

(ANTI-DISC GOLF / landscape architecture...)

<http://www.appeal-democrat.com/news/fire-98216-species-threatened.html>

http://media-newswire.com/release_1125017.html

<http://www.timesargus.com/article/RH/20100809/NEWS01/708099919/0/NEWS02> (LIFT-ACCESS)

http://www.bclocalnews.com/bc_thompson_nicola/clearwatertimes/business/99648029.html
(SKI RESORT COURSE)

http://mendosearch.com/moreinfo-acc_id-555.htm (ANDERSON BREWING, BOONVILLE)

<http://www.squaw.com/disc-golf> (SQUAW SKI RESORT COURSE)

<http://www.dailytribune.com/articles/2010/08/26/news/doc4c76ffb9b9d1a005625145.txt>

<http://www.tahoebonanza.com/article/20100802/NEWS/100809993/1061&ParentProfile=1050>
(TAHOE: recreation, geotourism...)

August 31 2010

http://www.wiscnews.com/news/local/article_477d0372-b4b2-11df-bf34-001cc4c03286.html

http://www.pe.com/localnews/stories/PE_News_Local_D_wattract31.29e3f33.html
RIVERSIDE COUNTY PARK, SANTA ANA RIVER, JURUPA

<http://www.katv.com/Global/story.asp?S=13055915> ARKANSAS

<http://www.uppermichiganssource.com/news/story.aspx?id=503483> MICHIGAN, VIDEO incl.

September 4 2010

<http://readingeagle.com/article.aspx?id=246583> (Olmstead brothers park in Penn!)

<http://www.marshallnews.com/story/1661549.html> (additional 18 holes proposed)

http://www.chicoer.com/ci_15970678 (Chico)

<http://www.enzymepdx.com/2010/disc-golf-no-caddies-no-carts/> (Portland, course designer)

<http://www.katv.com/Global/story.asp?S=13060315> (revitalization agent)

<http://www.cardboardconnection.com/interview-with-disc-golf-champ-avery-jenkins-from-2010-allen-ginter> (good overview of sport benefits...)

<http://www.youtube.com/watch?v=FFQ8S1LcioQ> (great youtube informative demo)

<http://www.youtube.com/watch?v=1DFP44Eogio&feature=related> (best cinematography I've seen!)

September 7 2010

<http://www.kmtr.com/news/local/story/Labor-Day-brings-out-disc-golf-in-Douglas-County/KU7CCfPrDkiF3pD8KDitgg.cspix> (southern oregon, growth of the sport...)

<http://www.youtube.com/watch?v=YHwlao8JUOc> (youtube video of above course, beautiful...)

September 9 2010

<http://media.www.theonlinerocket.com/media/storage/paper601/news/2010/09/10/News/New-Disc.Golf.Course.On.Campus.Open.To.The.Public-3929756.shtml>

<http://www.journalreview.com/articles/2010/09/08/news/05golf.txt>

http://www.victoriaadvocate.com/news/2010/sep/09/kb_goliad_park_091010_110550/?news&goliad-county

September 13 2010

<http://itemonline.com/local/x788123730/Disc-golf-tournament-to-kick-off-in-Huntsville>
http://billingsgazette.com/news/local/article_649defae-bbd1-11df-8401-001cc4c002e0.html

September 15 2010

http://dailyrecordnews.com/uppercounty/article_388ea112-c0ed-11df-8fc3-001cc4c03286.html
(rogue course goes legit)

<http://www.journalreview.com/articles/2010/09/15/viewpoints/01conroy.txt>

<http://uweekly.com/newsmag/09-15-2010/15720/disc-golf-a-sport-to-be-reckoned-with>

<http://bhpioneer.com/articles/2010/09/14/sports/doc4c8fa20c54dab851214149.txt> (new course)

September 16 2010

http://unioneagle.com/index.php?option=com_content&task=view&id=4506&Itemid=30 (new course)

<http://www.independentmail.com/news/2010/sep/23/new-disc-golf-course-anderson-gaining-lot-momentum/>

October 2 2010

http://www.mercurynews.com/breaking-news/ci_16227998?nclick_check=1

http://www.telluridewatch.com/view/full_story/9722646/article-Mountain-Village-Hosts-First-Ever-Disc-Golf-Tournament?instance=news_special_coverage_right_column

<http://www.kvoa.com/news/disc-golf-advocate-says-the-game-might-help-oro-valley/>

<http://www.linkedin.com/in/zactolbert> (Landscape Architect DG design firm)

<http://www.club51discgolf.com/>

<http://www.echopress.com/event/article/id/78569/group/Opinion/>

October 21 2010

<http://www.thesunchronicle.com/articles/2010/10/21/news/8129245.txt>

http://www.pe.com/localnews/stories/PE_News_Local_D_edisc17.2eb2326.html

<http://www.kimt.com/content/localnews/story/New-Disc-Golf-Course/T9UCLUUb9UGSRKOW0Xh1Jg.csp>

<http://www.shipnc.com/articles/2010/10/14/news/doc4cb7369038611369297214.txt>

<http://www.kxan.com/dpp/news/local/groups-squabble-over-disc-golf-course-> (LU debate)

http://www.theworldlink.com/sports/outdoors/article_77245144-d8fb-11df-a87b-001cc4c03286.html

<http://www.kansascity.com/2010/10/12/2306987/clay-county-to-open-three-disc.html>

(three course complex in Kansas City)

http://www.mercurynews.com/breaking-news/ci_16269568 (opposition/debate, Walnut Creek)

<http://www.dailyastorian.info/main.asp?SectionID=2&SubSectionID=395&ArticleID=74032>

<http://www.superiortelegam.com/event/article/id/46597/>

http://www.hometownsource.com/index.php?option=com_content&view=article&id=15280:disc-golf-takes-another-step-forward-in-oak-grove&catid=1:latest

<http://sandiegoaces.com/2010/02/08/kit-carson-park-to-get-new-disc-golf-course/> (Escondido)

Nov. 7 2010

<http://www.theithacajournal.com/article/20101103/NEWS01/11030391/1006/Disc-golf-course-opens-in-Danby>

<http://www.daytondailynews.com/news/community/bellbrook/fairborn-debuts-greene-countys-1st-disc-golf-course-994562.html>

(Ace hardware sponsored)

<http://www.tahoebonanza.com/article/20101104/NEWS/101109943/1061&ParentProfile=1050>

(Incline Village Proposal)

<http://www.steamboatpilot.com/news/2010/nov/03/disc-golf-course-opens-hayden/> (Steamboat)

<http://www.lemarssentinel.com/story/1677600.html>

http://www.fortmorgantimes.com/ci_16500679

<http://www.shipnc.com/articles/2010/10/14/news/doc4cb7369038611369297214.txt>

<http://thedailystar.com/localsports/x176176232/Disc-golf-gives-children-the-opportunity-to-think-outside-the-XBox>

<http://www.sfexaminer.com/local/Disc-golf-impact-under-review-105942348.html>

(SF McLaren Park – impact debate)

<http://www.bizjournals.com/austin/print-edition/2010/10/29/disc-golf-going-from-public-parks-to.html>

(Houck/ private development)

<http://www.reporternews.com/news/2010/nov/01/golf-fling/> (testimony to fitness)

<http://www.martinezgazette.com/news/story/i1595/2010/10/25/disc-golf-ideas-fly-prmcc>

(15% /yr? Growth) - only 8 courses in Bay Area....

http://www.wiscnews.com/bdc/news/local/article_22cabcd4-e24e-11df-9043-001cc4c002e0.html

http://www.kjonline.com/news/planning-boardcell-phone-tower-disc-golf-on-the-agenda_2010-10-24.html

<http://www.adn.com/2010/10/26/1520386/a-bonus-for-anchorage-disc-golfers.html>

(\$30K grant)

Nov 11 2010

http://www.nola.com/politics/index.ssf/2010/11/disc_golf_course_opens_in_city.html (New Orleans)

<http://www.thepaper24-7.com/main.asp?SectionID=23&SubSectionID=22&ArticleID=28600> (Indiana)

Nov 20 2010

<http://www.kxan.com/dpp/news/local/disc-golf-almost-done-at-pease-park->
(Austin, TX)

<http://www.whistlerquestion.com/article/20101117/WHISTLER12/311179961/-1/whistler/new-disc-golf-course-on-the-way> (Whistler BC)

<http://www.odt.co.nz/your-town/wanaka/136829/disc-golf-course-plan-opposed>

<http://www.hilltopviewsonline.com/disk-golf-becomes-popular-pastime-for-little-cash-1.1779549>

Nov 30 2010

<http://www.kxan.com/dpp/news/local/feedback-sought-for-disc-golf-course>

http://www.bcclocalnews.com/kootenay_rockies/nelsonstar/news/110699329.html

<http://dailycollegian.com/2010/11/28/recent-university-of-massachusetts-graduate-plans-to-build-frisbee-golf-course-connecting-orchard-hill-and-sylvan/>
(MLA grad's project)

Jan 1 2011

verdenews.com/main.asp?SectionID=2&SubsectionID=2&ArticleID=39792

www.theleafchronicle.com/article/20101231/NEWS01/12310324

(debate)<http://www.statesman.com/news/local/will-disc-golf-fly-at-southeast-austin-park-1149524.html>

<http://www.kristv.com/news/disc-golf-growing-sport/>

<http://www.advertiser-tribune.com/page/content.detail/id/533122/2-disc-golf-promoters-honored-by-park-department.html?nav=5005>

www.chicoer.com/news/ci_16872491 (Chico, mitigation, funding...)

<http://www.peninsuladailynews.com/article/20101222/NEWS/312229986/disc-golf-okd-for-clallam-county-parks-but-not-at-robin-hill>

http://www.oregonlive.com/portland/index.ssf/2010/12/north_portland_citys_only_disc.html
(eyes and maintenance)

<http://www.stuff.co.nz/auckland/local-news/central-leader/4477653/Disc-golf-at-Heron-Park>

(new course, New Zealand)

<http://www.wect.com/Global/story.asp?S=13670319> (mulching strategy, city)

Feb 18 2011

<http://www.redding.com/news/2011/feb/17/chain-reaction-having-a-fling-in-the-park/>

http://www.chicoer.com/news/ci_17268106 (the Chico, CA course story)

http://www.chicoer.com/news/ci_17336676 (the Chico, CA course story)

<http://www.khsltv.com/content/localnews/story/Sneak-Peak-Peregrine-Point-Disc-Golf-Course/KxyP4YPpOkCYo7L8oUntMg.csp> (the Chico story)

http://www.chicoer.com/fromthenewspaper/ci_17375478 (Chico, good pics and video)

<http://www.tampabay.com/things-to-do/blog/142/azalea-park-gets-new-disc-golf-course/>

<http://www.aspentimes.com/article/20110218/NEWS/110219822/1077&ParentProfile=1058>
(forest service and ski resorts off-season)

<http://www.chicagotribune.com/news/chi-ap-in-landfill-park,0,790011.story>
(Illinois / 9-holer on old landfill – landscape architects involved)

<http://shorelines.blogs.starnewsonline.com/10237/kure-beach-disc-golf-course-open-ceremony-this-month/> (North Carolina)

http://www.baldwincountynow.com/articles/2011/02/17/local_news/doc4d5d49ca019f1510379875.txt

http://www.statesmanjournal.com/article/20100925/LIFE/9250302/1048/rac_keyissues/Park-offers-choices?odyssey=nav%7Chead

<http://www.southbendtribune.com/article/20110128/News01/101280359/1011/News>
(heavy use and revitalization of land)

<http://www.americanchronicle.com/articles/yb/154868663> (Ore. Feldberg / econ boost)

<http://triblocal.com/tinley-park/2011/01/26/tinley-park-district-considers-2-7m-in-capital-projects-for-coming-year/> (part of a bigger budget)

<http://www.independent.com/news/2011/feb/12/new-things/> (santa barbara IV/ 9 hole expansion)

<http://www.statesman.com/news/local/achievements-1237222.html> (boy scout course)

Early June 2011

http://www.siouxcityjournal.com/weekender/sports/article_f37f1e51-bf12-5e94-b236-8a52d3017bde.html

<http://www.mercedsunstar.com/2011/05/23/1901568/atwater-resident-shares-passion.html>
(guy going for playing 50 states, 75 in CA)

<http://lawrenceville.patch.com/articles/disc-golf-course-now-open-at-mercercounty-park>
(New Jersey | 9-hole)

<http://www.thepilot.com/news/2011/may/29/new-disc-golf-course-opens-southern-pines/>

<http://www.dailyiowan.com/2011/06/06/Sports/23551.html> (blowin up in Iowa)

<http://www.uppermichiganssource.com/news/story.aspx?list=~%5Chome%5Clists%5Csearch&id=626716> (Physics lesson)

<http://www.newsherald.com/articles/parker-94166-disc-golf.html> (9-hole)

<http://florissant.patch.com/articles/disc-golf-continuing-to-expand-its-local-popularity-9>
(19 courses around St. Louis)

<http://www.stjamesnews.com/features/x536826133/Disc-Golf-Comes-to-St-James>
(9-hole Minnesota)

<http://www.coloradoan.com/article/20110616/UPDATES01/110616013/Fort-Collins-receives-Lottery-grant-help-build-disc-golf-course-Hughes-Stadium?odyssey=mod%7Cmostcom>
(Fort Collins | city pends \$120,000 on course)

http://www.daily-times.com/ci_18284860 (City supports additional 9 holes because of popularity)

<http://www.communitypress.ca/ArticleDisplay.aspx?e=3173551>

New course: "Students planned, designed and constructed the course," said Wilson. "The project fostered collaboration, problem solving, critical thinking and communication skills among the students involved." & "We tested the course and it's actually very fun," he said. "I'd give it a seven out of 10, but a lot depends on the weather conditions. I like the concept of going out and playing in a group."other great quotes in this one.

<http://unioneagle.com/2011/06/disc-golf-course-launched-in-princeton/>

<http://www.squaw.com/disc-golf>

<http://www.wjfw.com/stories.html?sku=20110528160206>

"Disc golf courses in general are great tourist attractions. I know the Chamber of Commerce has received numerous phone calls over the last few years asking about disc golf courses in the Lakeland area. The Chamber of Commerce is extremely encouraged by this course coming into town," explained the organizer of the course, Bill Stolpa.

<http://www.firsttracksonline.com/2011/06/17/copper-mountain-opens-for-summer-today/>
(Copper Mountain | Forest Service Approved 9-hole)

<http://www.franklincountycitizen.com/articles/2011/06/17/news/news02.txt>
(New Park includes 9-holer)

Late June 2011

http://www.daily-times.com/ci_18284860

<http://www.mcdonoughvoice.com/news/x1425881310/Disc-golf-course-coming-to-Bushnell>
3-hole course

<http://www.mysuburbanlife.com/bartlett/features/x536841951/Disc-golf-soars-into-the-suburbs>
(midwest disc golf ---- designers)

<http://jacksonville.com/business/2011-06-20/story/discs-allowed-fly-jacksonville-golf-course>
ball golf course changes to disc

<http://www.craigdailypress.com/news/2011/jun/17/hayden-town-board-oks-disc-golf-agreement/>
wetland protection

<http://affton.patch.com/articles/local-disc-golf-legend-making-national-impact-10>
course designer

<http://detroitports360.com/inaugural-round-at-mcdgc/>

<http://www.kitsapsun.com/news/2011/jun/22/disc-golfers-have-a-new-course-to-explore-in/>

http://www.rapidcityjournal.com/buttecounypost/latest/article_539061ec-9c9a-11e0-a979-001cc4c002e0.html (riverwalk enhancement)

<http://www.t-g.com/story/1738722.html>

<http://lakeinthehills.patch.com/articles/kreutzer-farmstead-from-dairy-farm-to-disc-golf>
(from dairy farm to disc golf) – master plan usurps traditional rec with disc golf

<http://stcharles.patch.com/articles/disc-golf-continuing-to-expand-its-local-popularity-10>
19 courses around St Louis | Dave McCormack is the man....

<http://www.newsherald.com/articles/parker-94166-disc-golf.html> (9-holer funded by P&R)

<http://www.livingstondaily.com/article/20110614/NEWS01/106140302/Marion-puts-fun-spin-outdoors?odyssey=tab%7Ctopnews%7Ctext%7Cfrontpage>

Mid-July 2011

<http://watsonville.patch.com/articles/watsonville-scores-big-disc-golf-world-championships-finals>
(park revitalization, TV coverage)

<http://www.marionstar.com/article/20110711/NEWS01/107110301/Community-donations-fund-disc-golf-course-Prospect>
(community funded 9-holer)

<http://www.pnwlocalnews.com/kitsap/ckr/news/125188418.html>
(new course, integrated terrain/ materials design, par 4s and 1 par 5)

September 2011

<http://posttrib.suntimes.com/sports/7643755-556/pnc-opens-new-disc-golf-course.html>
(Indiana, proposed sculptures at each tee)

October 2011

http://thetandd.com/news/local/article_b389071e-fdfe-11e0-b434-001cc4c03286.html

Jan 2012

<http://www.pal-item.com/article/20120127/SPORTS/201270314/Disc-golfers-create-destination-course-hope-tournament-spreads-sport-s-enjoyment?odyssey=tab%7Ctopnews%7Ctext%7CFRONTPAGE>

("Destination course" in Indiana, circles lake, private but free)

Feb 2012

http://www.lompocrecord.com/lifestyles/recreation/course-now-available-at-beattie-park/article_d0d3f95a-4fbb-11e1-b959-0019bb2963f4.html (new course lompoc)

<http://sports.yahoo.com/top/news?slug=ycn-10930456> new course Sycuan SD

http://www.lompocrecord.com/news/local/disc-golf-taking-flight-in-lompoc/article_eba03360-5539-11e1-8e36-0019bb2963f4.html

<http://www.heraldtribune.com/article/20120219/ARTICLE/120219442/2055/NEWS?Title=Disc-golf-course-proposed-for-Payne-Park> 9-hole beginner course in Florida

March 2012

<http://www.fstribune.com/story/1826472.html>

<http://www.northstarpubs.com/articles/lab/disc-golf-course-design>

Landscape Architect Business – magazine/ journal – story on course design

April 2012

<http://www.adn.com/2012/04/23/2437055/westchester-disc-golf-course-to.html>

(misbehavior and closure in Alaska)

<http://brainerddispatch.com/sports/2012-04-06/disc-golf-disc-golf-dream-becomes-reality-clc>
(college campus)

<http://www.hollandsentinel.com/news/x304761861/Disc-golf-course-founder-Ben-Barton-honored-for-dedication>

(Michigan, award from city for design, service)

<http://centralwisconsinhub.wausaudailyherald.com/article/20120421/WDH0101/204210655/New-disc-golf-course-pleases-players?odyssey=tab%7Cmostpopular%7Ctext%7CFRONTPAGE>

(Wisconsin: officials sport cost of 9 holes)

June 2012

http://www.multibriefs.com/briefs/pdga/Austin_Disc_Golf_Course_Leads_in_Innovation.pdf

<http://www.kvue.com/news/New-disc-golf-course-opens-in-Austin-158297425.html>

(2 stories, one course, in Austin TX)

<http://www.charlotteobserver.com/2012/06/22/3332759/love-of-disc-golf.html>

Charlotte/NC disc golf mecca

<http://www.woodburybulletin.com/event/article/id/41397/>

(Washington, MN Disc golf)

http://www.coloradoan.com/article/20120625/SPORTS/306250035/Living-Wright-Life-One-man-mixes-his-passion-Frisbee-his-local-business?odyssey=nav%7Chead&nclck_check=1

(Wright Life Guy, helped build 50+ disc golf courses in CO)

<http://www.emporiamagazine.com/news/2012/jun/19/ten-years-ago-no-one-would-have-ever-guessed-sport/>

(DG events are bringing six figure dollars to areas/ kansas example; emporia)

<http://www.charlotteobserver.com/2012/06/22/3332759/love-of-disc-golf.html>

(Charlotte, NC Region growth)

July 2012

<http://rattlingchains.com/?p=1319> (DISC GOLF ART PHOTOGRAPHY)

<http://newsok.com/disc-golf-grows-in-popularity/article/3691085> (growth in Oklahoma)

"fastest growing sport nobody has ever heard of"

<http://www.dailyiowan.com/2012/07/06/Sports/28958.html> (growth in Iowa City – more than hippies)

<http://www.whitelakebeacon.com/news/27791-new-disc-golf-course-opens-in-montague-township>

(Growth in Washington Co., Oregon)

<http://www.whitelakebeacon.com/news/27791-new-disc-golf-course-opens-in-montague-township>

(Nature Center, Kids Tees, Pavilions)

http://syvnews.com/sports/disc-golf-continues-to-grow/article_13dd00ee-d45e-11e1-af43-0019bb2963f4.html

(growing on CA central coast; Santa Maria, Santa Ynez, etc...)

August 2012

<http://www.doorcountydailynews.com/news/details.cfm?clientid=28&id=42307>

http://www.denverpost.com/recommended/ci_21356492

(DG in Colorado, growth...)

<http://www.myfoxlubbock.com/news/local/story/Unused-east-Lubbock-location-transformed-into-new/8oxsAtiJuE6trfdhnrDWNw.csp>

(TEXAS: underutilized space, lifestyle factor, parks n rec coop)

October 2012

<http://www.dailyregister.com/article/20121004/NEWS/121009436/1011/ENTERTAINMENTLIFE>

(Illinois- P&R shells out \$12K – ex USFS guy consults veg clearing – popular support.....)

http://wcdgd.com/literature/WCDGD_VsAlt_v2.0.pdf

World Champion Disc Golf Designers webpage: DG vs other sports installations

[http://www.goupstate.com/article/20121026/ARTICLES/121029751/1088/sports?Title=USC-\(Upstate-opens-disc-golf-course\)](http://www.goupstate.com/article/20121026/ARTICLES/121029751/1088/sports?Title=USC-(Upstate-opens-disc-golf-course))

University of South Carolina: University supported/funded course

<http://www.milforddailynews.com/news/x1890065123/Tri-County-students-help-golf-course-installation>

New course in MA, volunteers help with final install

<http://www.kboi2.com/news/local/Disc-golf-helps-at-risk-teens-175184901.html?tab=video&c=y>

(at risk teens install as community service, fundraising for new course)

"We need as many new courses as we can get (ones we have are packed)" - video | Idaho

SAMPLE ENTRIES

Selected Citations and prominent themes from Disc Golf Story Catalog May 2010 – May 2012 by Michael Plansky

[listed chronologically, selected from a list of 193 recorded internet news stories]

ENTRY 1

Negley, Erin. "Disc golf course set to soar at Conrad Weiser Homestead." Reading Eagle 09/04/2010. . 09/15/2010 <<http://readingeagle.com/article.aspx?id=246583> >.

.....
"Anything that's going to increase visitation and going to bring more attention to the site is a positive thing," said David G. Sonnen, Friends president.

ENTRY 2

Hansen, Joe. "Disc golf: No Caddies, No Carts." EnzymePDX: Portlands Best Stories 09/01/2010. Outdoors, Sports. 09/15/2010 <<http://www.enzymepdx.com/2010/disc-golf-no-caddies-no-carts/2/>>

.....
about Jerry Miller (longtime disc golfer, course designer):

"Whether it's a game, sport or just a pastime, disc golf is now enjoying growing popularity in Oregon and beyond. Hundreds of tournaments have sprung up around the world and local parks departments are scrambling to build courses to increase park use."

"It was really hard back 30 years ago to get parks to even listen," Miller said. "Now parks departments are calling us."

ENTRY 3

Swift, Mary. "Cle Elum Disc Golf Course Gets Go-Ahead." Daily Record News 09/16/2010. . 09/20/2010 <http://www.dailrecordnews.com/uppercounty/article_388ea112-c0ed-11df-8fc3-001cc4c03286>

.....
rogue course: underutilized landscape: compromise with city:

"Mike Kidder, owner of Cle Elum Bike and Hike, set up a disc golf course on property along the railroad tracks in Cle Elum several years ago. City officials told him to take it down because there was concern about liability.

The city offered him another location: at the east end of town in the area known as Hanson Ponds."

ENTRY 4

KXAN. "Groups squabble over disc golf course Different views on the use of city-owned land." KXAN.com, Austin TX 10/07/2010. . 10/15/2010 <<http://www.kxan.com/dpp/news/local/groups-squabble-over-disc-golf-course->>.

ENTRY 5

Altman, Michelle. "Recent University of Massachusetts graduate plans to build frisbee golf course connecting Orchard Hill and Sylvan." Daily Collegian, UMASS 11/28/2010. . 12/05/2010 <<http://dailycollegian.com/2010/11/28/recent-university-of-massachusetts-graduate-plans-to-build>.

frisbee-golf-course-connecting-orchard-hill-and-sylvan/>.

Landscape Architecture MLA Graduate builds course with department/faculty support

ENTRY 5

Worley, Debra. "Kure Beach disc golf course expected to open in early 2011." WETC North Carolina, Channel 6 12/14/2010. 12/20/2010 <<http://www.wect.com/Global/story.asp?S=13670319>>.

According to Mayor Dean Lambeth, the course will serve as a place to dispose of yard waste in an environmentally friendly way. They will use a wood chipper to chip up limbs and spread over the fairways.Ecosystem services.

ENTRY 6

Rueff, Ashley "Tinley Park District considers \$2.7M in capital projects for coming year" Trib Local, Tinley Park 01/26/2011 . 02/18/2011 <<http://triblocal.com/tinley-park/2011/01/26/tinley-park-district-considers-2-7m-in-capital-projects-for-coming-year/>>. - part of a bigger budget

ENTRY 7

WJFW News "Brandy Lake Disc Golf Course Holds Grand Opening" Trib Local, Tinley Park 01/26/2011 . 02/18/2011 <<http://triblocal.com/tinley-park/2011/01/26/tinley-park-district-considers-2-7m-in-capital-projects-for-coming-year/>>

Disc golf wrapped into \$7M of capital projects

ENTRY 8

WJFW News. "Brandy Lake Disc Golf Course Holds Grand Opening." wjfw.com 05/28/2011. stories. 06/05/2011 < <http://www.wjfw.com/stories.html?sku=20110528160206>>.

\$100,000 budget

"Disc golf courses in general are great tourist attractions. I know the Chamber of Commerce has received numerous phone calls over the last few years asking about disc golf courses in the Lakeland area. The Chamber of Commerce is extremely encouraged by this course coming into town," explained the organizer of the course, Bill Stolpa.

ENTRY 9

Bull, Roger. "Discs allowed to fly at Jacksonville golf course: Builder D.R. Horton gives entrepreneur permission to set iup at Baymeadows location." Florida Times-Union 06/20/2011. . 06/21/2011 < <http://jacksonville.com/business/2011-06-20/story/discs-allowed-fly-jacksonville-golf-course>>.

BALL GOLF COURSE TURNS INTO DISC GOLF; ball golf waning, disc golf waxing?

ENTRY 10

First Tracks!!. "Copper Mountain Opens for Summer Today." First Tracks!! Online Media 06/17/2011. . 06/21/2011 < <http://www.firsttracksonline.com/2011/06/17/copper-mountain-opens-for-summer-today/>>.

.....
Forest Service Approval

ENTRY 11

Spates, Alicia. "Disc Golf Soars into the suburbs." Suburban Life Publications 06/22/2011. . 06/25/2011 < First Tracks!!. "Copper Mountain Opens for Summer Today." First Tracks!! Online Media 06/17/2011. . 06/21/2011 < <http://www.firsttracksonline.com/2011/06/17/copper-mountain-opens-for-summer-today/>>.

G: Burris Pit disc golf drosscape photo survey, 05/21/12







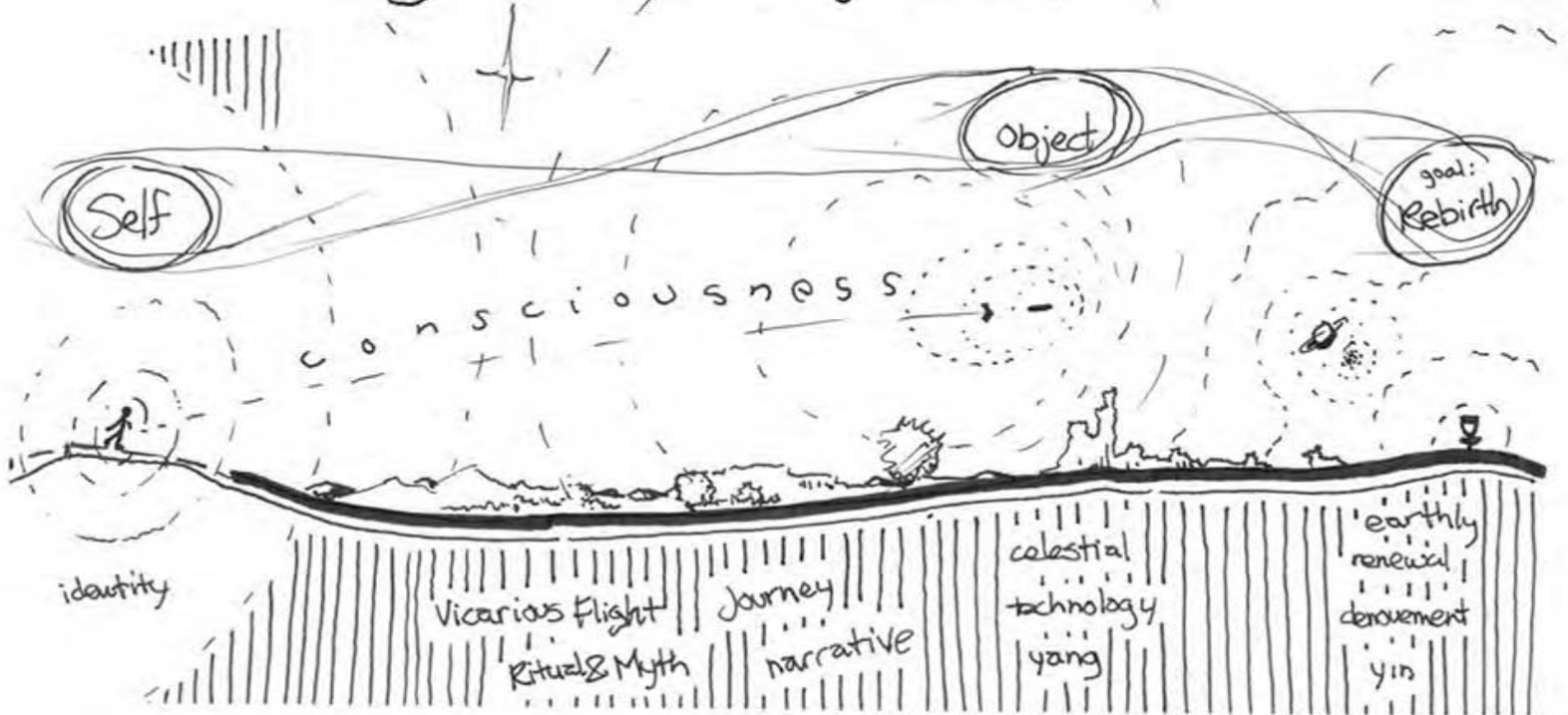
H: Playful pretense process diagram

playful pretense MIXED METAPHOR ANALYSIS DIAGRAM



METAPHYSICS of [DISC] GOLF

[ADAPTED FROM MURPHY ITZ]
Golf in the Kingdom



December 2013, Online Praise for *Disc Golf Course Design: Inscribing Lifestyle*:

"There's a lot of useful info that I could have used while writing a course proposal several years ago."

-- Tom12003 | DGCourseReview.com (DGCR) course design forum.

"Fantastic work!"-- ElementZ | DGCR Forum

"Holy reading Batman" -- Horsman | DGCR Forum

"Really sweet graphics work throughout. This has to be one of the more substantial single documents about disc golf that exists." -- Billtvshow | DGCR Forum

"Great job! The sport of disc golf, city and parks & rec planners and their boards and budgets, can all benefit from this. We absolutely need more serious studies in academia of course design, construction and maintenance, sports physiology, sports and hospitality management and more to help legitimize and mainstream disc golf as an industry. It really is fertile ground right now due to the lack of many papers such as yours. This will also help parks & rec professionals and local disc golfers and disc golf clubs, understand why using or working with professional course designers is often in their best interest." -- MacDaddy | DGCR Forum

"I can't believe you transcribed each interview... although the reading is entertaining, particularly related to the gambling aspects of the game" -- Calico | Land8.com Forum (for landscape architecture professionals)

"Really nice work..... Very informative, and just at a stage where I need to have my thoughts gain more clarity in those areas."

-- Terry "the Pirate Calhoun" | DiscGolfersR.Us Forum

"Something that I thought would have been interesting to explore in a L. Arch. thesis. Alternative Recreational activities and their ability to improve the landscape. Can LArch do something to make Disc Golf, Geocaching, Mtn Biking, etc. improve the environment(?)" -- Jordan Lockman | Land8 Forum

"I was particularly pleased to see your review of the literature on 'play' (starting on pg. 43).

It looks like you covered most of the usual authors (e.g. Roger Caillois and Mihaly Csikszentmihalyi) and gave a good overview of the topic." -- Jeverett | DGCR Forum

"Go Broncos! I did not discover disc golf until after I graduated but I wish we could set up a course on campus at CPP.

I look forward to digging deeper into this."

-- Discgolfaholic | DGCR Forum

"The spread of appropriate landscaping tactics is definitely needed, and it's great you address the subject in your treatise."

-- Rick Valley, Earthkeeper Landscaping

Linkedin "Sustainable Landscape Design" Group Forum

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